REPORT RESUMES

ED 016 732 UD 005 136

EVALUATION OF THE COMPENSATORY EDUCATION PROGRAM OF THE SAN FRANCISCO UNIFIED SCHOOL DISTRICT, 1966-1967.

BY- SORENSEN, PHILIP H. AND OTHERS

STANFORD RESEARCH INST., MENLO PARK, CALIF.

REPORT NUMBER SRI-1-6336 PUB DATE OCT 67

EDRS PRICE MF-$1.25 HC-$11.92 296P.

DESCRIPTORS- *PRESCHOOL PROGRAMS, *PROGRAM EVALUATION, *COMPENSATORY EDUCATION PROGRAMS, *TEST RESULTS, STATISTICAL ANALYSIS, READINESS (MENTAL), INTELLIGENCE TESTS, TABLES (DATA), DATA, QUESTIONNAIRES, READING PROGRAMS, EDUCATIONAL FINANCE, READING ACHIEVEMENT, DISADVANTAGED YOUTH, STUDENT TEACHER RATIO, CLASS SIZE, INSERVICE TEACHER EDUCATION, SCHOOL SERVICES, ACHIEVEMENT TESTS, FEDERAL PROGRAMS, PUBLIC SCHOOLS, ENRICHMENT PROGRAMS, SAN FRANCISCO, CALIFORNIA, ESEA TITLE 1

THIS EVALUATION CONTAINS DETAILED INFORMATION ON THE FIRST YEAR OF SAN FRANCISCO'S PREKINDERGARTEN AND COMPREHENSIVE COMPENSATORY EDUCATION PROGRAMS FOR CHILDREN OF ALL AGES FUNDED UNDER THE ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) OF 1965. SOME OF THE ACTIVITIES IN THE COMPREHENSIVE PROGRAM WERE TO REDUCE PUPIL-TEACHER RATIO AND CLASS SIZE, OFFER INSERVICE TRAINING, AND PROVIDE SUPPORTING AND AUXILIARY SERVICES AND ENRICHMENT EXPERIENCES. DATA ASSESSING CHANGES IN THE READING ACHIEVEMENT OF STUDENTS IN GRADES FOUR THROUGH 12 REVEAL THAT STUDENTS WHO DID NOT PARTICIPATE IN THE ESEA PROGRAM, THOSE IN THE TARGET AREA SCHOOLS WHOSE LEARNING DIFFICULTIES WERE NOT SEVERE, GAINED MORE MONTHS IN READING ACHIEVEMENT (6.8) THAN DID THE PARTICIPATING ESEA PUPILS (5.0). IT IS NOTED, HOWEVER, THAT THE TWO GROUPS MAY NOT HAVE BEEN APPROPRIATELY COMPARED. EVALUATIONS OF THE PREKINDERGARTEN PROGRAM DEMONSTRATE THAT THE PUPILS WHO HAD PARTICIPATED IN THE PROGRAM PERFORMED "SOMEWHAT BETTER" ON THE METROPOLITAN READINESS TEST THAN DID TARGET AREA KINDERGARTENERS WHO HAD NO PRESCHOOL EXPERIENCE. ON THE PEABODY PICTURE VOCABULARY TEST THE PREKINDERGARTEN PUPILS SCORED ONLY SLIGHTLY HIGHER THAN THE NONPARTICIPANTS. CONTAINED IN THE EXTENSIVE APPENDIXES TO THIS REPORT ARE (1) A "MARKET BASKET GAME" IN WHICH AN ELEMENTARY SCHOOL PRINCIPAL GIVEN A SPECIFIC BUDGET MAKES HYPOTHETICAL PURCHASES OF NEEDED SCHOOL RESOURCES, (2) TEACHER QUESTIONNAIRES AND RESULTING DATA, (3) READING ACHIEVEMENT TEST SCORES, AND (4) QUESTIONNAIRES ANSWERED BY PROJECT PERSONNEL. THIS REPORT IS IN TWO VOLUMES, "DETAILED FINDINGS" AND "APPENDIXES TO." (LB)

05136

ED016732

EVALUATION OF THE COMPENSATORY EDUCATION PROGRAM OF THE SAN FRANCISCO UNIFIED SCHOOL DISTRICT, 1966–1967

DETAILED FINDINGS

Prepared for:

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
SAN FRANCISCO, CALIFORNIA

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

October 1967

EVALUATION OF THE COMPENSATORY EDUCATION PROGRAM OF THE SAN FRANCISCO UNIFIED SCHOOL DISTRICT, 1966-1967

DETAILED FINDINGS

Prepared for:

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
SAN FRANCISCO, CALIFORNIA

By: PHILIP H. SORENSEN AND THOMAS C. THOMAS

SRI Project 1-6336

UD 005 136

FOREWORD

This report contains a detailed evaluation of the first full year's operation of Public Law 89-10 Title I Compensatory Education Program in the San Francisco Unified School District. The evaluation must be viewed with care since the program is not a one-time affair--it is a commitment by all concerned to better education throughout the District's schools and, in particular, schools that serve a major share of the city's economically and culturally disadvantaged. Short term results of any project are important only as precursors of long term effects of the program. Early results will often be indicative, but perhaps almost as often they will not show what the cumulative impact eventually will be.

The body of the report is organized to follow the definition of programs and projects found in the 1966-67 Compensatory Education Program of the San Francisco Unified School District. Complete descriptions of the measurement instruments are given in the Appendixes and abstracted into the text as needed to clarify the discussion. The evaluations are "final" to the extent that certain questions have been answered. However, they are not complete in that many more questions could have been asked than were, and many of the answers that were given raise more questions than they settle. In addition, certain analyses still in work have not been reported. For example, it was not possible to complete the analysis of in depth case studies and student grades or the multiple regression analyses.

This report is one of a series of reports to be issued periodically during the 1967-68 school year. The objective will be to combine past insights, improved techniques, and further data on program operation into an evolving picture of the Compensatory Education Program as it is functioning in the San Francisco Unified School District.

Stanford Research Institute bears sole responsibility for the quality of this report, but the report would not have been possible without the full cooperation of District personnel, especially Mr. Harold Weeks, Director of Research; Mr. Isadore Pivnick, Coordinator of Federal/State Projects; Mr. Victor Rossi, Supervisor of Compensatory Education; and Mrs. Marjorie Pulsifier, Research Assistant. The cooperation of other members of the central administration and school staffs has been equally important.

CONTENTS

FOREWORD iii

PROJECT 1: PREKINDERGARTEN CENTERS 1

Description of Program 1
Effects of Prekindergarten 2
Measured Characteristics of Prekindergarten Pupils, 1966-67 . . . 15

PROJECT 2: COMPREHENSIVE SCHOOL-AGE COMPENSATORY PROGRAM 29

Introduction 29
Data Sources 29
Lowered Pupil-Teacher Ratio and Class Size 32
Changes in Reading Achievement in Grades 4 Through 12 During 1966-67 60
In-Service Training 104
Supporting and Auxiliary Services 111
Enrichment Experiences 146

ILLUSTRATIONS

1 General Plan for Testing Prekindergarten Pupils 16

2 Illustrative Distributions of Scores 77

TABLES

1 Racial Composition of Five Elementary Schools in Which Kindergarten Pupils Were Tested to Assess the Effects of Attending Prekindergarten 3

2 Metropolitan Readiness Test Scores in May 1967 for Kindergarten Pupils Who Attended Prekindergarten Compared with Scores of Those Who Did Not 4

3 Metropolitan Readiness Test Scores from Five Kindergartens According to School, Pupil Sex, and Prekindergarten Experience 6

4 Metropolitan Readiness Test Scores from Five Kindergartens According to Pupils' Ethnic Group, Sex, and Prekindergarten Experience 7

5 Tests of Mean Differences in Metropolitan Readiness Test Scores Between Prekindergarten and No Prekindergarten Groups 8

6 Tests of Mean Differences in Metropolitan Readiness Test Scores Between Male and Female Pupils Within Prekindergarten and No Prekindergarten Groups 9

7 Peabody Picture Vocabulary Test Data from May 1967 for Randomly Selected Kindergarten Pupils from Two Schools Who Attended or Did Not Attend Prekindergarten in Spring 1966 . . . 12

8 Analysis of Variance for Peabody Picture Vocabulary Test Scores of Kindergarten Pupils in Schools 05 and 02 12

TABLES

9 PPVT Scores from Pupils in Prekindergarten in 1965-66 Compared with PPVT Scores from the Same Pupils in Kindergarten in 1966-67 14

10 Summary of Intelligence Quotients Obtained from Peabody Picture Vocabulary Tests Administered to Prekindergarten Pupils 18

11 Significance of Mean Differences Between Independent Sets of Scores from Peabody Picture Vocabulary Tests Administered to 1965-66 Prekindergarten Pupils and to 1966-67 Prekindergarten Pupils from Two Schools and Over All Schools 20

12 Summary of Intelligence Quotients Obtained from Columbia Mental Maturity Scales Administered to Prekindergarten Pupils 21

13 Comparison of Testers' Judgments of the Validity of Intelligence Quotients Obtained from Tests Administered to Prekindergarten Pupils 22

14 Mean Differences Between Independent Sets of Scores from Tests Administered to Prekindergarten Pupils 25

15 Mean Differences and Correlations Between Pairs of Scores from Tests Administered to Prekindergarten Pupils 26

16 Data Sources for Evaluating Program Elements 30

17 Average Total Reading Scores in Grade Equivalents in Grades 1, 2, and 3 35

18 Median Total Reading Scores in Grade Equivalents in Grades 1, 2, and 3 37

19 Principals' Selection of Reduced Class Size Teachers 40

20 Class Size Distributions Proposed by Principals in the "Market Basket" Problem 41

21 Testing Program for San Francisco Unified School District . . 61

22 September 1966 to May 1967 Gains in Stanford and Gates-McGinitie Reading Test Grade Equivalent Scores for Samples of Pupils in Grades 4 Through 12 66

TABLES

23 September 1966 to May 1967 Gains in Stanford Reading Test Grade Equivalent Scores for Samples of Pupils in Grades 4 Through 6 68

24 September 1966 to May 1967 Gains in Gates-McGinitie Reading Survey Grade Equivalent Scores for Samples of Pupils in Grades 7 Through 9 70

25 September 1966 to May 1967 Gains in Gates-McGinitie Reading Survey Grade Equivalent Scores for Samples of Pupils in Grades 9 Through 12 71

26 Summary of Association Between Program Participation and Gains in Reading Achievement by Pupils at Various Grade Levels Over Half-Year and Whole-Year Periods 73

27 Comparison of Measures of Gains by Participants and Nonparticipants in Grades 4 Through 10 75

28 Gain Rates Based on Group Means for Participating and Nonparticipating Pupils from Grades 4 Through 10 for the Period September-May 1966-67 81

29 Use of Aides in the Compensatory Education Program 83

30 Teachers' Responses to Questions Regarding the Benefit of Aides 85

31 Ratings of Teachers' Aides by Junior and Senior High School Teachers and Other Staff 87

32 Grade in Which Each Item of Equipment Received Highest Rating in "A Great Deal" Category 92

33 Material and Equipment Items Ranked Highest and Lowest by Elementary Teachers Within each Grade Level 93

34 Ranking of Materials and Equipment According to Relative Usefulness by Junior and Senior High School Teachers in the Compensatory Education Program 95

35 Gains in Reading Achievement Test Scores by Pupils from Grades High 4 Through High 6 Who are Bused to Schools Outside the Target Area and by Pupils of Similar Grade Levels in Receiving Schools and Target Area Schools 97

TABLES

36 Changes in Stanford Reading Test (Primary II) Grade Equivalent Scores for a Sample of Nonpublic School Pupils in Grade 4 103

37 Numbers of Pupils Using Speech and Hearing Services in Compensatory and Noncompensatory Schools 115

38 Evaluation of Field Trips from Teachers' Questionnaire . . . 149

PROJECT 1: PREKINDERGARTEN CENTERS

Description of Program

The prekindergarten program during the school year 1966-67 was a continuation of the 1965-66 program with few changes of consequence. The overall purpose of the prekindergarten program was to compensate for limitations in prior experiences of children from deprived environments. Specific objectives of the program were to:

1. Provide sensory and intellectual stimulation.
2. Offer a good English language model and encourage verbal expression.
3. Facilitate the child's adjustment to group participation and school life.
4. Familiarize the child with adult teaching authority.
5. Offer the enrichment of creative arts and creative expression.
6. Foster health and physical development through supervised play, nutrition, and medical services.
7. Establish a close school-parent relationship that can serve as a motivating factor during the remainder of the child's school career.

Centers were established at the beginning of the year in six schools, and an additional one was established during the year in a seventh school. In all, 24 half-day sessions were operated for all or part of the school year in these seven schools. About 20 pupils were assigned to each session, although some sessions included more than this number of pupils. Each session met five times per week. Sessions were conducted by two professional teachers and two paid aides, thereby providing an adult-to-pupil ratio in each session and throughout the program of approximately 1 to 5. The budgeted allowance was for a total of 480 pupils per semester. Turnover throughout the year resulted in approximately 620 different pupils participating in the prekindergarten program for part or all of the school year.

In addition to day-to-day classroom activity consistent with the foregoing objectives, special services were provided for participants; these included screening for evidence of emotional disturbance, minimal brain damage, and speech problems so that aid might be begun early in the child's school career. Psychological tests of general ability were administered to 611 pupils, and results of these tests are reported below. Field trips were taken to broaden pupils' experiences. Parents were invited to observe the program and to discuss their interests with professional personnel who staffed the program. Either a hot breakfast or lunch was provided, depending on whether a child attended a forenoon or afternoon session.

Effects of Prekindergarten

Two longitudinal measures of prekindergarten effects were carried out during 1966-67. One measure was to assess the effects of prekindergarten participation on performance in readiness tests administered near the end of the second semester of kindergarten. The other measure was to estimate the effects of prekindergarten participation on "verbal intelligence." Results of these assessments are presented and discussed in the following sections.

Effects on Reading Readiness

In May 1967, Metropolitan Readiness Tests were administered to 316 kindergarteners in five schools. Four of these schools were so-called saturation services schools; the remaining school was predominantly Chinese in its ethnic composition. The ethnic characteristics of these schools are shown in Table 1.

Table 2 shows the distribution of Metropolitan Readiness Test scores for 97 kindergarteners who participated in prekindergarten during the second semester of 1965-66 and compares them to scores of 219 kindergarteners who had not previously attended prekindergarten. As the data indicate, those kindergarteners who attended prekindergarten performed somewhat better as a group than did kindergarteners who did not attend prekindergarten. The difference --4.8 raw score points--was statistically significant ($p < .01$). Whether this difference is of sufficient magnitude to be of practical significance in planning for or predicting subsequent school performance is a matter for continued observation. The mean score for both groups falls in the readiness status defined by the test publishers as "low normal."

Table 1

RACIAL COMPOSITION OF FIVE ELEMENTARY SCHOOLS IN WHICH KINDERGARTEN PUPILS WERE TESTED TO ASSESS THE EFFECTS OF ATTENDING PREKINDERGARTEN

	Percent of Total Enrollment by Ethnic Categories						
School	Negro	Chinese	Japanese	Filipino	Spanish-Speaking	Others	Total
05	6.6%	2.0%	0.1%	2.5%	65.4%	23.4%	100.0%
03	0.9	94.6	0.1	0.4	0.4	3.7	100.0
21	95.6	--	--	--	--	4.4	100.0
02	77.1	1.5	0.4	3.2	2.5	15.4	100.0
01	86.1	0.9	1.1	2.8	3.1	6.0	100.0

Note: Schools 05, 21, 02, and 01 were saturation services schools. School 21 includes two units plus an annex; all three units are combined as one in the above summary and in subsequent tables.

Source: Racial Estimates of Pupils Attending San Francisco Public Schools, September 1966. San Francisco Unified School District, November 1966.

Table 2

METROPOLITAN READINESS TEST SCORES IN MAY 1967 FOR KINDERGARTEN PUPILS WHO ATTENDED PREKINDERGARTEN COMPARED WITH SCORES OF THOSE WHO DID NOT

Raw Score	Attended Prekindergarten Spring 1966	Did Not Attend Prekindergarten Spring 1966	Total
90+	--	--	--
85-89	1	--	1
80-84	1	1	2
75-79	4	5	9
70-74	7	5	12
65-69	9	20	29
60-64	8	20	28
55-59	9	23	32
50-54	12	23	35
45-49	14	20	34
40-44	5	21	26
35-39	11	17	28
30-34	8	28	36
25-29	4	16	20
20-24	3	12	15
15-19	--	4	4
10-14	--	3	3
5-9	1	1	2
0-4	--	--	--
Total	97	219	316
Mean	51.3	46.5	48.0
Standard deviation	15.76	15.89	16.01

Note: $P < .01$ for test of mean difference between kindergarteners who attended prekindergarten in Spring 1966 and kindergarteners who did not attend prekindergarten before kindergarten enrollment. Statistics calculated from grouped data.

To simplify computations in detailed comparisons of differences between kindergarteners who attended prekindergarten and those who did not, a sample of 116 scores was drawn at random from the 219 scores shown in Table 2. (The adequacy of this sample is supported by the similarity in mean scores--46.5 compared with 46.6--and in standard deviations--15.89 compared with 15.72--for the two distributions. One may accept the sample of 116 scores as reflecting the larger group of 219 scores.)

Table 3 displays differences by pupil sex between the prekindergarten and no prekindergarten groups within each of the five schools. Table 4 shows differences by pupil sex between the prekindergarten and no prekindergarten groups within five ethnic groupings. Tests of relevant mean differences both between and within groups are summarized in Tables 5 and 6.

Briefly, the differences revealed through these comparisons are as follows:

1. Overall, prekindergarten experience appears to have had a favorable effect as measured against the criterion of "readiness." The mean difference between the prekindergarten and no prekindergarten group was statistically significant--$p < .01$ in the comparison of 97 pupils to 219 pupils and $p < .025$ in the comparison of 97 pupils to a sample of 116 pupils.

2. Comparisons according to pupil sex suggest a slightly greater favorable effect for female pupils than for male pupils. Both male and female pupils who attended prekindergarten tended to score higher on the Metropolitan Readiness Test than did their cohorts who did not attend prekindergarten, but the difference between groups of female pupils was greater ($p < .05$) than between groups of male pupils ($.25 > p > .10$).

3. In three of the five schools (05, 03, and 21), differences between pupils who attended prekindergarten and those who did not favored those who attended prekindergarten. In two of these three schools (05 and 03), the differences were great enough to be considered as other than chance ($p < .05$). The modal ethnic group in school 05 is Spanish-speaking, and that in school 03 is Chinese (see Table 1). These findings offer inferential support for the argument that prekindergarten is most effective (against the "readiness" criterion) when it serves children from backgrounds where English is least likely to be the first language of the home.

Table 3

METROPOLITAN READINESS TEST SCORES FROM FIVE KINDERGARTENS ACCORDING TO SCHOOL, PUPIL SEX, AND PREKINDERGARTEN EXPERIENCE

		Prekindergarten			No Prekindergarten		
School (coded)	Pupil Sex	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
05	Male	8	45.1	17.96	21	40.5	16.40
	Female	14	51.1	12.06	21	43.0	15.69
	Total	22	49.0	14.77	42	41.7	16.10
03	Male	16	57.4	12.35	10	56.3	8.50
	Female	13	60.3	9.89	10	46.4	17.66
	Total	29	58.7	11.41	20	51.4	14.72
21	Male	5	48.6	7.06	7	49.7	12.28
	Female	3	69.7	5.73	11	54.6	17.66
	Total	8	56.5	12.14	18	52.7	15.97
02	Male	17	52.3	17.05	16	52.0	12.85
	Female	49	45.9	8.84	9	49.6	13.18
	Total	26	50.1	15.05	25	51.1	13.02
01	Male	7	36.9	16.29	5	38.4	11.00
	Female	5	29.0	12.60	6	34.5	4.92
	Total	12	33.6	15.36	11	36.3	8.49
Total	Male	53	50.4	16.50	59	47.2	14.99
	Female	44	51.5	14.86	57	46.0	16.41
	Total	97	50.9	15.79	116	46.6	15.72

Note: Means and standard deviations in this table were calculated directly from raw scores. The prekindergarten sample of 116 was drawn randomly from a population of 219 (see Table 2). Differences in descriptive statistics between those shown in this table and in Table 2 are due to sampling and to errors of grouping reflected in computations in Table 2.

Table 4

METROPOLITAN READINESS TEST SCORES FROM FIVE KINDERGARTENS ACCORDING TO PUPILS' ETHNIC GROUP, SEX, AND PREKINDERGARTEN EXPERIENCE

Pupils' Ethnic Group	Pupil Sex	Prekindergarten			No Prekindergarten		
		Number	Mean	Standard Deviation	Number	Mean	Standard Deviation
Spanish-speaking	Male	10	46.2	16.24	12	35.9	15.04
	Female	11	50.6	12.71	10	40.6	13.56
	Total	21	48.5	14.68	22	38.0	12.26
Chinese	Male	16	57.4	12.35	9	55.3	8.42
	Female	13	60.3	9.88	6	44.8	12.23
	Total	29	58.7	11.40	15	51.1	11.35
Negro	Male	21	45.2	13.80	23	49.3	14.13
	Female	13	42.2	15.45	23	46.7	17.72
	Total	34	44.0	14.52	46	48.0	16.08
White	Male	4	73.2	8.55	8	53.0	13.99
	Female	2	53.0	11.0	9	48.8	15.24
	Total	6	66.5	13.42	17	50.8	14.80
Others and unknown	Male	2	23.5	0.50	7	42.6	12.56
	Female	5	54.4	14.99	9	47.9	17.91
	Total	7	45.6	18.85	16	45.6	16.01
Total	Male	53	50.4	16.50	59	47.2	14.99
	Female	44	51.5	14.86	57	46.0	16.41
	Total	97	50.9	15.79	116	46.6	15.72

Note: Means and standard deviations in this table were calculated directly from raw scores. The no prekindergarten sample of 116 was drawn randomly from a population of 219 (see Table 2). Differences in descriptive statistics between those shown in this table and Table 2 are due to sampling and to errors of grouping reflected in computations in Table 2.

Table 5

TESTS OF MEAN DIFFERENCES IN METROPOLITAN READINESS TEST SCORES BETWEEN PREKINDERGARTEN AND NO PREKINDERGARTEN GROUPS

Group	Mean Difference*	"t"†	p
All pupils, all schools	+4.3	1.983	<.025
Male pupils, all schools	+3.2	1.070	>.10
Female pupils, all schools	+5.5	1.762	<.05
All pupils, school 05	+7.3	1.785	<.05
All pupils, school 03	+7.3	1.831	<.05
All pupils, school 21	+3.8	0.633	>.25
All pupils, school 02	-1.0	-0.246	>.40
All pupils, school 01	-2.7	-0.504	>.25
Spanish-speaking pupils, all schools	+10.5	2.479	<.01
Chinese pupils, all schools	+7.6	2.042	<.025
Negro pupils, all schools	-4.0	-1.148	>.10
White pupils, all schools	+15.7	2.206	<.025
Other pupils, all schools	0	0	>.40

---

* Plus (+) sign means difference favors prekindergarten group; minus (-) sign means difference favors no prekindergarten group.

† All "t" tests one-tailed.

Table 6

TESTS OF MEAN DIFFERENCES IN METROPOLITAN READINESS TEST SCORES BETWEEN MALE AND FEMALE PUPILS WITHIN PREKINDERGARTEN AND NO PREKINDERGARTEN GROUPS

	Mean Differences Between Male and Female Pupils Within Prekindergarten Groups			Mean Differences Between Male and Female Pupils Within No Prekindergarten Groups		
School	Mean Difference*	"t"†	p	Mean Difference*	"t"†	p
All five	-1.1	0.345	>.50	+1.2	0.411	>.50
05	-6.0	0.793	>.20	-2.5	0.492	>.50
03	-2.9	0.678	>.50	+9.9	1.515	>.10
21	-21.1	3.926	<.01	-4.9	0.653	>.50
02	+6.4	1.211	>.20	+2.4	0.415	>.50
01	+7.9	0.862	>.20	+3.9	0.658	>.50

---

* Plus (+) sign means difference favors male pupils; minus (-) sign means difference favors female pupils.

† All "t" tests two-tailed.

4. Relationships between ethnic background and prekindergarten effects appear even stronger when pupils are grouped across schools according to ethnic background. Regardless of school attended, the differences between groups of Spanish speaking and Chinese pupils were large enough to be considered other than chance ($p < .01$ and $p < .025$). A statistically significant difference between groups of white pupils also appears in Table 4 but this difference must be interpreted with caution because of the very small number of cases involved. Conversely, the absence of a statistically significant difference between small groups of pupils from other ethnic backgrounds does not disprove a relationship between ethnic background and the utility of prekindergarten.

5. Table 6 helps separate possible interactions between pupil sex and prekindergarten experience. As Table 6 demonstrates, differences between male and female pupils tended not to be statistically significant regardless of whether the comparison was within the group that had attended prekindergarten or within the group that had not. A large difference favoring female pupils was found in school 21. It must be strongly emphasized, however, that this difference is based on an extremely small number of cases--three females and five males. Other differences, relative to their standard errors, were trivial.

6. The major anomaly emerging from analyses reported in Tables 3 through 6 is the difference between groups of Negro pupils. For both male and female Negro pupils, the mean performance of those who attended prekindergarten was below that of the mean performance of those who did not attend prekindergarten. The difference approaches, but does not quite reach, statistical significance (i.e., $.25 > p > .10$), but is nevertheless of sufficient magnitude to suggest that the two groups may be fundamentally different from one another. Several possibilities may be suggested and will be explored in later analyses of present data and in subsequent observation of prekindergarten and kindergarten activities.

   a. One possibility is that, for some complex of reasons, less apt Negro youngsters went to prekindergarten and more apt Negro children were either unable or unwilling to attend prekindergarten.

   b. A second possibility is that the activities of prekindergarten had a suppressive effect on Negro children in contrast to the apparently beneficial effect they had on children from other ethnic groups.

c. A third possibility is that some "coaching" for the criterion test occurred in some, but not in all, kindergarten classrooms in which Negro pupils were the dominant group.

A major problem affecting interpretation of data such as that portrayed in Tables 2 through 6 is the nonramdom selection that operates in determining who will and who will not attend prekindergarten. If basic differences exist between children who attend prekindergarten and those who do not (including the degree and kind of home support and encouragement that they are provided), analyses of the kind shown above will never be able to separate the influences of prekindergarten from the array of other factors that affect school performance. With the present data, the differences between Negro students and, on the other hand, Spanish-speaking and Chinese students presents the greatest anomaly and offers the greatest challenge to subsequent evaluation.

One possible change in administrative practice that would be helpful in future efforts to understand better the influences of prekindergarten on children of different cultural and ethnic backgrounds would be random assignment of pupils to prekindergarten at the time of registration in contrast to the present "first come-first serve" practice. With random assignment, the effects of selection by the parents of the child, while not literally controllable, at least could be balanced so that they would not confuse future comparisons.

Effects on Verbal Intelligence

Two approaches were followed in an attempt to identify the extent to which prekindergarten participation might influence growth in verbal intelligence as measured by the PPVT (Peabody Picture Vocabulary Test). Ability to make the responses called for by the PPVT appear to be susceptible to modification through the experiences provided by the prekindergarten program. One effort to identify such possible effects was through the analysis of PPVT responses of 60 randomly selected kindergarteners from two schools. Half from each school participated in prekindergarten during the preceding year, and half did not. The second approach was to retest the PPVT kindergarteners who attended prekindergarten to see whether their performance changed.

Results of the first approach described above are shown in Tables 7 and 8. Table 7 simply shows the basic statistics that describe the four samples. As the mean PPVT IQ scores reveal, those pupils in the total

Table 7

PEABODY PICTURE VOCABULARY TEST DATA FROM MAY 1967 FOR RANDOMLY SELECTED KINDERGARTEN PUPILS FROM TWO SCHOOLS WHO ATTENDED OR DID NOT ATTEND PREKINDERGARTEN IN SPRING 1966

Prekindergarten Experience	Descriptive Statistics	School 05	School 02	Total
Yes	Number	15	17	32
	Mean IQ	83.40	88.41	86.06
	Standard deviation	15.01	14.54	14.98
No	Number	15	13	28
	Mean IQ	79.87	89.62	84.39
	Standard deviation	14.20	14.54	15.16
Total	Number	30	30	60
	Mean IQ	81.63	88.93	85.28
	Standard deviation	14.72	14.56	15.08

Table 8

ANALYSIS OF VARIANCE FOR PEABODY PICTURE VOCABULARY TEST SCORES OF KINDERGARTEN PUPILS IN SCHOOLS 05 AND 02

Source of Variation	Sum of Squares	df	Variance Estimate	F	p
Prekindergarten participation	41.6288	1	41.6288	0.183	n.s.
School of attendance	799.3500	1	799.3500	3.518	<.10
Interaction	87.0556	1	87.0556	0.383	n.s.
Individual differences	12,724.1489	56	227.2169	--	--
Total	13,652.1833	59			

---

n.s. = not significant.

sample who participated in prekindergarten in 1965-66 produced slightly higher scores than those pupils who did not attend prekindergarten; however, the differences between the two school samples was greater than the difference between the groups with and without prekindergarten experience. Differences between schools were greatest for the subsample without prekindergarten experience.

A two-way analysis of variance performed on these data is summarized in Table 8. As could be anticipated from study of Table 7, the main source of variation in the total set of scores was individual differences among pupils, i.e., the "within groups" variance. Neither the effect of prekindergarten participation nor that of interaction between school attendance and prekindergarten participation were statistically significant with this randomly selected sample of kindergarten pupils. The effect of school of attendance approached statistical significance as could be anticipated from the mean score differences shown in Table 7.

Results of the retest are displayed in Table 9. As in the foregoing analysis of variance, the data are drawn from schools 05 and 02. In school 05, the sample drawn for kindergarten testing included 10 pupils for whom PPVT scores obtained in the previous year were also available. Test-retest scores correlated moderately well (r = .571), but with the very small sample, this correlation fell short of statistical significance at the .05 level. The mean difference showed a slight gain from 1965-66 to 1966-67 testing (i.e., 84.5 compared with 87.5), but the small magnitude of the difference and its large standard error leave unanswered the question of whether the gain can be legitimately considered other than chance.

The results in school 02 were somewhat more clearcut. In that school, more matched cases were found, the correlation was slightly greater (and significant at the .05 level), and the mean difference of nearly 10 score points was large enough to be considered reliable. When the cases from the two schools were pooled, the larger sample size contributed to the reliability of the statistics--both the test-retest correlation and the test of significance of the mean difference yielded probability values below the .01 level.

On the basis of the evidence summarized in Table 9, it appears that performance on the PPVT can be modified. Still unanswered, until more cases can be analyzed over time, is the question of how much of the apparent gain is attributable to prekindergarten experiences and how much may be attributed to experience with the test itself. Some questions regarding the use and interpretation of the PPVT as (1) an estimate of verbal intelligence or general aptitude and as (2) a criterion of pupil growth are discussed in the subsequent section.

Table 9

PPVT SCORES FROM PUPILS IN PREKINDERGARTEN IN 1965-66 COMPARED WITH PPVT SCORES FROM THE SAME PUPILS IN KINDERGARTEN IN 1966-67

School	Years Compared	Mean IQ	Standard Deviation	Number of Paired Scores	Significance of Mean Difference (p)	Correlation	Significance of Correlation (p)
05	1965-66	84.5	11.97	10	>.10	.571	>.05
	and						
	1966-67	87.5	14.28				
02	1965-66	77.9	16.29	15	<.025	.620	<.05
	and						
	1966-67	88.5	20.82				
Total	1965-66	80.5	15.07	25	<.01	.580	<.01
	and						
	1966-67	88.2	14.89				

Measured Characteristics of Prekindergarten Pupils, 1966-67

At the prekindergarten level, there are problems of obtaining valid estimates of pupil ability, particularly for preliterate children from economically disadvantaged backgrounds within realistic bounds of time and cost. Therefore, efforts were made to compare and assess the merits of four widely-used tests--the PPVT, the CMMS (Columbia Mental Maturity Scale), the S-B (Stanford-Binet) Scale of Intelligence, and the MP-S (Minnesota Pre-School) Scale.

The Testing Plan

During 1965-66, limitations of time and qualified personnel permitted only partial assessment of the backgrounds of children participating in the prekindergarten program. As the 1965-66 report indicated, about half of the prekindergarten pupils that year were tested on the PPVT. The score distributions, moreover, were disturbing, since they included a substantial number of instances where testing was attempted but no score obtained, and, among the scores obtained, a mean PPVT IQ score that was considerably lower than expected even considering the environmental backgrounds of the children tested. Largely on the basis of that experience, a design was developed whereby several tests might be used during 1966-67 as a means for (1) comparing the utility of the tests themselves and (2) providing corroborative data regarding the aptitudes of the children in the program.

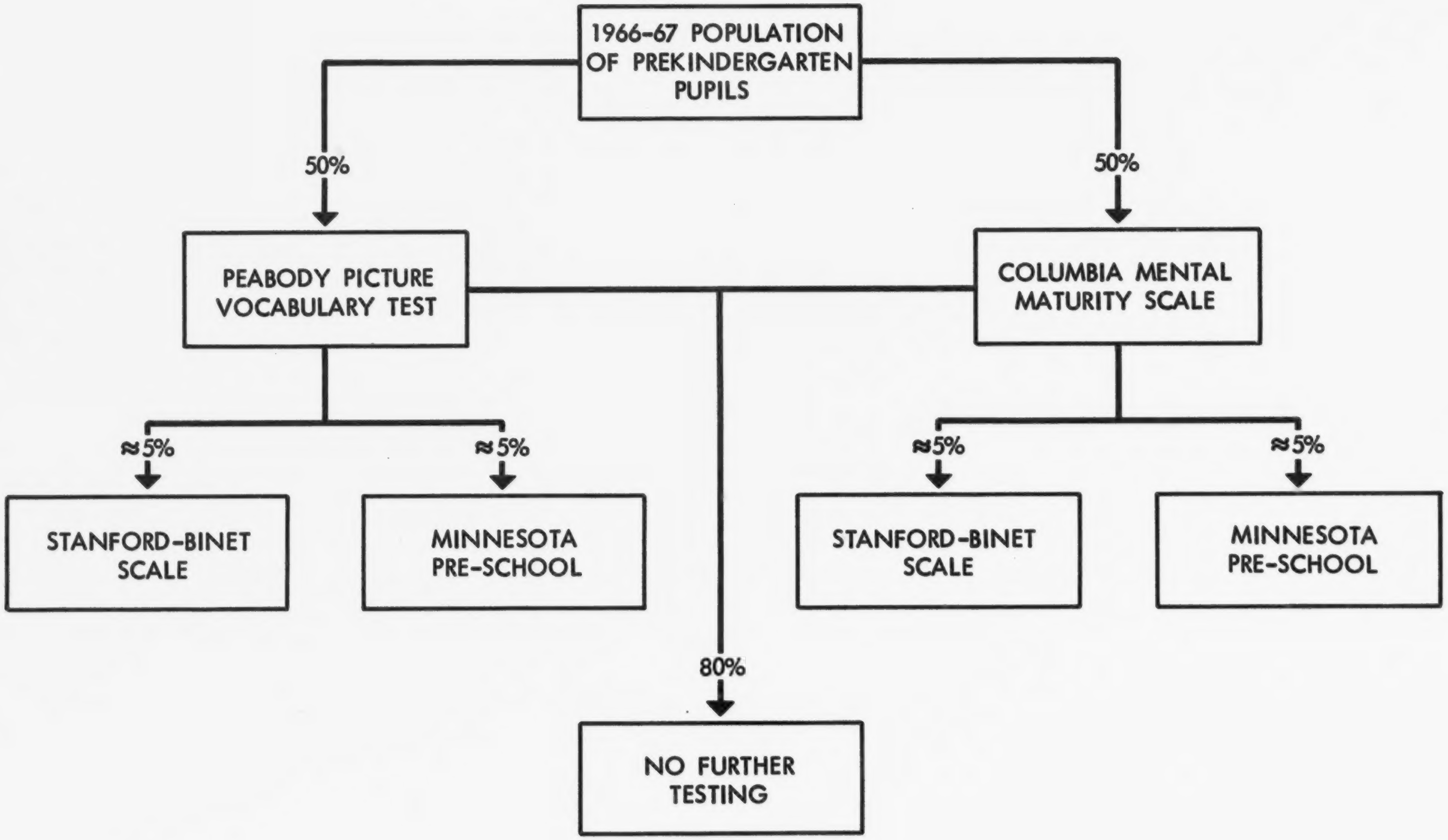
In consultation between representatives of the San Francisco Unified School District and Stanford Research Institute, the general plan illustrated in Figure 1 was agreed on. Basically, the plan provided for the following:

1. The total population of prekindergarten participants was split into random halves. Lists of enrollees in each of the prekindergarten centers were first alphabetized. In each list, either odd-numbered or even-numbered names were designated to be administered a PPVT or a CMMS. The odd-even selection for each center was determined by coin toss. The PPVT and CMMS samples, therefore, can be considered random within schools or centers and random over all schools.

2. In each of the two subsamples, two additional small subsamples were drawn randomly--one to be administered a S-B and one to be administered an MP-S. When the plan was conceived, it was hoped

FIGURE 1

GENERAL PLAN FOR TESTING PREKINDERGARTEN PUPILS


1966-67 POPULATION OF PREKINDERGARTEN PUPILS
50%
50%
PEABODY PICTURE VOCABULARY TEST
COLUMBIA MENTAL MATURITY SCALE
≈5%
≈5%
≈5%
≈5%
STANFORD-BINET SCALE
MINNESOTA PRE-SCHOOL
STANFORD-BINET SCALE
MINNESOTA PRE-SCHOOL
80%
NO FURTHER TESTING

that each of these four subsamples could include approximately 30 cases or about 10 percent of the two half-population samples. As testing progressed, it became necessary for reasons of time and cost to reduce the sizes of these four S-B and MP-S subsamples to 15 to 20 cases each.

The selection of the PPVT and the CMMS as the two overall tests permitted a comparison of two tests of aptitude that each require about equal time to administer, i.e., 15 to 30 minutes per child. Both tests yield a "mental age" score and permit computation of an intelligence quotient. The two tests differ widely in content. Although both require a hearing vocabulary if rapport is to be established and instructions understood, neither test demands a verbal response. The S-B and MP-S scales were selected for obvious reasons--both have been widely used and critically studied over a long period and they provide a frame of reference within which the PPVT and CMMS may be evaluated.

Results of the Testing

A total of 611 prekindergarten pupils were tested during 1966-67 on either the PPVT or the CMMS or both. The PPVT was administered to 316 pupils, and the CMMS was administered to 295 pupils. Twelve of these pupils were tested on both the PPVT and CMMS when, in the judgment of the psychologist administering the test, dual scores would aid later assessment. Three female psychologists conducted all the testing.*

PPVT Scores in 1966-67. Table 10 shows the results of PPVTs given to 316 prekindergarteners in seven schools. The mean PPVT IQ was 83.7 for the 194 scores judged by the testers as valid. This is 61.4 percent of the total number of tests attempted. Mean scores by school ranged from 71.1 in school 05 to 95.9 in school 38. Testing was attempted but no score reported in 67 of the 316 or 21.2 percent of the cases; 60 percent of these failures to obtain or report scores occurred in school 03 in which Chinese pupils were the modal ethnic group.

---

* One weakness in the design resulted from the administrative assignment of two of these psychologists to particular prekindergarten centers. Because of this, it was not possible to randomize the assignment of tester to pupil and thereby control for tester bias. Hopefully, this influence can be examined in future years since, as subsequent discussion will indicate, some stylistic differences among testers seems evident.

Table 10

SUMMARY OF INTELLIGENCE QUOTIENTS OBTAINED FROM PEABODY PICTURE VOCABULARY TESTS ADMINISTERED TO PREKINDERGARTEN PUPILS 1966-67

School	Statistic	Scores Judged Valid*	Scores Judged of Doubtful Validity*	Totals by School	Testing Attempted but No Score Obtained
05	Number	35	19	54	5
	Mean	71.1	53.3	63.7	—
	Standard deviation	23.33	13.01	21.77	—
03	Number	23	0	23	40
	Mean	84.9	—	84.9	—
	Standard deviation	19.83	—	19.83	—
21	Number	36	10	46	1
	Mean	82.4	49.0	75.1	—
	Standard deviation	17.97	13.43	21.94	—
02	Number	34	8	42	8
	Mean	91.6	65.6	86.7	—
	Standard deviation	15.31	9.88	17.69	—
01	Number	31	5	36	12
	Mean	85.1	64.5	82.2	—
	Standard deviation	16.94	4.02	17.32	—
105	Number	21	13	34	1
	Mean	80.8	59.8	72.6	—
	Standard deviation	13.92	20.63	19.91	—
38	Number	14	0	14	0
	Mean	95.9	—	95.9	—
	Standard deviation	19.80	—	19.80	—
Total all schools	Number	194	55	249	67
	Mean	83.7	56.8	77.8	—
	Standard deviation	19.71	15.65	21.95	—

---

* Validity of test scores judged by psychologist administering test.

Comparison of 1965-66 PPVT Scores to Those of 1966-67. The mean PPVT IQ score obtained for a sample of 182 prekindergarten pupils in 1965-66 was 84.1, which is very close to the mean of 83.7 obtained for 194 pupils in 1966-67. These data are shown in Table 11. Table 11 also compares PPVT IQ scores from 1965-66 with those from 1966-67 for schools 05 and 02. These two comparisons show opposite trends; scores were substantially higher in 1965-66 than in 1966-67 in school 05 but were markedly lower in school 02. Further analyses of other data, such as pupil mobility and changes in the ethnic character of the prekindergarten classes in these two schools in successive years, will be necessary before an explanation can be offered for these shifts.

CMMS Scores in 1966-67. The CMMS was administered to 295 prekindergarteners as summarized in Table 12. Slightly less than half the tests--140 out of 295--yielded scores judged by the testers as valid. The mean CMMS IQ for the 140 scores judged to be valid was 102.1. Mean valid scores ranged from 98.4 in school 21 to 114.9 in school 38. The highest proportions of scores judged to be valid were obtained in school 05 in which Spanish-speaking pupils composed the modal ethnic group and in school 02 in which Negro pupils formed the modal ethnic group. The highest proportions of failures to report a score occurred in schools 02, 01, and 05--Negro pupils composed the modal ethnic group in schools 02 and 01 and Spanish-speaking pupils were dominant in school 05.

Differences between the PPVT and CMMS in the Probability of Obtaining a Valid Score. Table 13 indicates the differences between the PPVT and the CMMS in the frequency with which valid scores were obtained. As noted earlier, the psychologist administering the tests judged the validity of the scores she obtained. It is apparent that the two tests differ from one another in their ability not only to elicit any score but also scores judged to be valid. This was true in schools 05, 03, 21, 01, and for the total of seven schools. Differences in school 02 approached the .05 level. Differences in schools 105 and 38 were not statistically significant.

Judged by the question of whether the test is likely to yield a score judged to be a valid estimate of "aptitude," the PPVT appears to be somewhat superior to the CMMS. However, it should be noted that in schools 05 and 03--the two schools in which the probability of English language difficulties among pupils is greatest--the two tests did not differ appreciably from one another in their ability to elicit a score

Table 11

SIGNIFICANCE OF MEAN DIFFERENCES BETWEEN INDEPENDENT SETS OF SCORES FROM PEABODY PICTURE VOCABULARY TESTS ADMINISTERED TO 1965-66 PREKINDERGARTEN PUPILS AND TO 1966-67 PREKINDERGARTEN PUPILS FROM TWO SCHOOLS AND OVER ALL SCHOOLS

School	Statistic	Pupils from 1965-66	Pupils from 1966-67	Significance of Mean Difference (p)
05	Number	10	35	
	Mean IQ	84.5	71.1	<.05
	Standard deviation	11.97	23.33	
02	Number	15	34	
	Mean IQ	77.9	91.6	<.01
	Standard deviation	16.29	15.31	
All schools	Number	182*	194†	
	Mean IQ	84.1	83.7	>.80
	Standard deviation	16.13	19.71	

---

* Sample of prekindergarten pupils from 6 operating centers, 1965-66. See Table 24 in Evaluation Report: San Francisco Unified School District Compensatory Education Program, September 1,1966.

† Sample of prekindergarten pupils from seven operating centers, 1966-67. See Table 10 of this report for specification of scores included in this comparison.

Table 12

SUMMARY OF INTELLIGENCE QUOTIENTS OBTAINED FROM COLUMBIA MENTAL MATURITY SCALES ADMINISTERED TO PREKINDERGARTEN PUPILS

1966-67

School	Statistic	Scores Judged Valid*	Scores Judged of Doubtful Validity*	Totals by School	Testing Attempted but No Score Obtained
05	Number	30	9	39	18
	Mean	99.7	89.7	97.4	--
	Standard deviation	11.16	8.85	11.46	--
03	Number	22	19	41	16
	Mean	103.2	83.3	94.0	--
	Standard deviation	9.57	7.48	13.17	--
21	Number	16	19	35	7
	Mean	98.4	87.0	92.2	--
	Standard deviation	11.07	6.05	10.42	--
02	Number	25	7	32	18
	Mean	100.9	88.2	98.1	--
	Standard deviation	9.56	4.95	10.21	--
01	Number	16	13	29	14
	Mean	99.4	89.0	94.7	--
	Standard deviation	7.68	6.32	8.77	--
105	Number	19	12	31	0
	Mean	104.1	91.2	99.1	--
	Standard deviation	11.25	11.75	13.04	--
38	Number	12	--	12	3
	Mean	114.9	--	114.9	--
	Standard deviation	16.52	--	16.52	--
Total all schools	Number	140	79	219	76
	Mean	102.1	87.5	96.9	--
	Standard deviation	11.74	8.27	12.73	--

---

* Validity of test scores judged by psychologist administering test.

Table 13

COMPARISON OF TESTERS' JUDGMENTS OF THE VALIDITY OF INTELLIGENCE QUOTIENTS OBTAINED FROM TESTS ADMINISTERED TO PREKINDERGARTEN PUPILS
1966-67

		Estimate of Score Validity (percent)			Total	
School	Test	Judged Valid	Judged Doubtful	No Score Obtained	Percent	Number
05	PPVT	59.3%	32.2%	8.5%	100.0%	59
	CMMS	52.6	15.8	31.6	100.0	57
03	PPVT	36.5	0	63.5	100.0	63
	CMMS	38.6	33.3	28.1	100.0	57
21	PPVT	76.6	21.3	2.1	100.0	47
	CMMS	38.1	45.2	16.7	100.0	42
02	PPVT	68.0	16.0	16.0	100.0	50
	CMMS	50.0	14.0	36.0	100.0	50
01	PPVT	64.6	10.4	25.0	100.0	48
	CMMS	37.2	30.2	32.6	100.0	43
105	PPVT	60.0	37.1	2.9	100.0	35
	CMMS	61.3	38.7	0	100.0	31
38	PPVT	100.0	0	0	100.0	14
	CMMS	80.0	0	20.0	100.0	15
Total	PPVT	61.4	17.4	21.2	100.0	316
	CMMS	47.5	26.8	25.8	100.0	295

Note: Chi squares were computed from 2 x 3 contingency tables for Schools 05 through 01 and for the total of seven schools; 2 x 2 contingency tables were used for Schools 105 and 38. Probabilities of differences in distributions by school and for the total are as follows: 05, $p < .005$; 03, $p < .001$; 21, $p < .001$; 02, $p > .05$; 01, $p < .025$; 105, $p > .90$; 38, $p = .125$; and total, $p < .005$.

judged to be valid. (They were different in the frequencies of "doubtful" scores and "no" scores.) Similarly, the two tests were not much different from one another in school 38, which showed the highest mean score on both the PPVT and CMMS.

The relative utility of the two tests cannot be estimated accurately by simply asking whether (1) a score can be obtained or (2) a "valid" score can be obtained, since these questions would have different answers when asked with regard to pupils of such differing characteristics as probable language in the home. The questions are also answered differently when the style of the tester is considered, as discussed in the following paragraphs.

Evidence of Differences in Style Among Testers. As previously noted, administrative assignments of psychologists to serve specific schools prevented random assignment of testers to pupils. The situation was complicated further by the fact that the third psychologist who administered tests worked, to some extent, in all of the seven schools. However, well over half of the tests administered in schools 05, 21, and 105 were administered by one psychologist, and another administered a majority of the tests in schools 03, 02, and 01.

Examination of Table 13 suggests genuine differences between these two psychologists in their tendencies to (1) obtain (or report) a score and (2) judge an obtained score as valid. On the "doubtfuls" and the "no" scores, they differed considerably. One psychologist failed to report any score on only about 10 percent of all attempts but classified about 35 percent of all obtained scores as of doubtful validity. The chances were about 3 to 1 that she would fail to report a score for the CMMS in contrast to the PPVT, but her classifications of "doubtful" scores were about evenly split between the PPVT and CMMS. The other psychologist failed to report a score on about 33 percent of all attempts and classified about 26 percent of all obtained scores as of doubtful validity. The chances were about even that she would fail to report a score with the CMMS or the PPVT, but she was about three times more likely to classify a CMMS than a PPVT score as "doubtful."

The foregoing comments regarding tester styles and possible tester preferences are, at most, indicative of the desirability of examining such questions in further detail in a better designed experiment. Data currently available do not permit an adequate reconstruction of the situational factors affecting the testing sessions, and no evaluation of the professional competence of either tester is intended or implied. The inferential evidence available, however, suggests strongly that the choice of a "best" test (when the choice is to be made between instruments such as the PPVT and the CMMS) must take account of such factors as testers' experience and preferences, ability to establish rapport with youngsters of different cultural and ethnic backgrounds, and other variables likely to affect the testing situation.

Comparisons of Independent Measures on Four Different Tests. Table 14 displays several comparisons of mean IQ scores obtained on different groups of prekindergarten pupils with the PPVT, the CMMS, the Stanford-Binet, and the Minnesota Pre-School Scale.

The data show that the PPVT and the CMMS yield substantially different indices of aptitude when administered to random halves of the prekindergarten population. This appears as Comparison 2 in Table 14, in which the mean CMMS IQ score is nearly 20 points greater than the mean PPVT IQ score.

Table 14 also shows that mean scores from different administrations of the CMMS, the S-B, and the MP-S do not differ markedly from one another--all means for these tests fall within the range from 94.1 to 102.1 and none of the differences reaches a level of clear statistical significance. The variabilities of these three tests are also close to one another--standard deviations range from 10.27 to 12.98.

The third finding shown in Table 14 is that mean scores from different administrations of the PPVT also tend to be enough like one another to preclude a conclusion of other than chance differences among these measures.

Comparisons of Related Measures on Four Different Tests. In keeping with the testing plan, scores on two or more tests were available for a number of prekindergarten pupils, thus permitting both comparisons of mean differences and a measure of association between scores. These data are shown in Table 15.

Mean differences between the PPVT and the other tests--CMMS, S-B, and MP-S--that could have been expected from comparisons of independent means shown in Table 14 were borne out in comparisons of paired scores in Table 15. The mean PPVT IQ was more than 20 points lower in each available comparison to another test mean. In each instance (Comparisons 1, 4, and 6 in Table 15), these differences were statistically significant despite the small number of cases. Mean differences between the CMMS and the S-B or between the CMMS and MP-S were not large enough to be considered other than chance.

Table 14

MEAN DIFFERENCES BETWEEN INDEPENDENT SETS OF SCORES FROM TESTS ADMINISTERED TO PREKINDERGARTEN PUPILS 1966-67

Comparison	Mean IQ	Standard Deviation	Number of Scores	Significance of Mean Difference (p)
One				
S-B	94.1	12.98	31	>.10
MP-S	98.8	12.03	31	
Two*				
PPVT	83.7	19.71	194	<.001
CMMS	102.1	11.74	140	
Three				
S-B	97.5	12.56	13	>.50
S-B	96.7	11.31	10	
Four				
MP-S	99.6	11.25	11	>.50
MP-S	102.1	12.49	13	
Five				
S-B	97.5	12.56	13	>.50
S-B	100.0	10.27	8	
Six				
CMMS	99.8	12.68	10	>.50
CMMS	98.5	10.53	13	
Seven				
PPVT	73.9	19.38	13	>.50
PPVT	76.6	26.25	11	
Eight				
PPVT	73.9	19.38	13	>.20
PPVT	65.2	24.55	12	
Nine				
PPVT	76.6	26.25	11	>.20
PPVT	65.2	24.55	12	

---

* These two samples were not completely independent since 12 pupils in the total of 334 were tested on both tests. The difference between paired scores for these 12 cases appears as Comparison 6 in Table 15. The effect of including these 12 cases in the above test of mean differences is negligible; their exclusion does not alter the conclusion that the magnitude of the mean difference is not due to chance.

Table 15

MEAN DIFFERENCES AND CORRELATIONS BETWEEN PAIRS OF SCORES FROM TESTS ADMINISTERED TO PREKINDERGARTEN PUPILS 1966-67

Comparison	Mean IQ	Standard Deviation	Number of Paired Scores	Significance of Mean Difference (p)	Correlation	Significance of Correlation (p)
One						
S-B	97.5	12.56	13	<.001	.717	>.01
PPVT	73.9	19.38				
Two						
S-B	96.7	11.31	10	>.10	-.080	>.10
CMMS	99.8	12.68				
Three*						
S-B	100.0	10.27	8	>.10	.344	>.10
CMMS	96.4	11.93				
Four						
MP-S	99.6	11.25	11	<.02	.280	>.10
PPVT	76.6	26.25				
Five						
MP-S	102.1	12.49	13	>.10	.570	<.05
CMMS	98.5	10.53				
Six						
PPVT	65.2	24.55	12	<.01	.164	>.10
CMMS	91.8	9.92				

---

* Comparison 3 is the same as Comparison 2 except for the elimination of two cases in which the Stanford-Binet scores were considered of doubtful validity by the psychologist who administered the tests.

Correlations between sets of paired scores were somewhat erratic, probably due largely to the small number of cases available. (The original testing plan was intended to yield a minimum of 15 paired scores for the test combinations shown earlier in Figure 1. Some pairs were eliminated, however, when the tester judged the validity of one or the other score to be too much in doubt to be accepted. School closing and other conflicts prevented additional testing to compensate for these lost cases.) With the exception of Comparison 2 in Table 15, which included two doubtful scores, the remaining five correlation coefficients were positive and two of the five were statistically significant. The low correlation between the PPVT and the CMMS is of special interest, since it tends to reinforce the impression that the two tests are far from interchangeable estimates of pupil aptitude.

Policy Implications from the Comparisons of Measures of Pupil Aptitude. On the basis of the foregoing data, several suggestions may be offered regarding aptitude testing among economically disadvantaged, preliterate children of diverse cultural and ethnic backgrounds.

1. When reporting an intelligence quotient to a teacher, counselor, social case worker, parent, or other relevant person, the identity of the test from which the score was obtained should be clearly indicated. As the preceding data indicate, IQs obtained from the four tests examined could, in the case of a single pupil, correspond to one another only by chance. As group measures, it appears virtually certain that mean IQ scores obtained from the PPVT would be markedly lower than mean IQ scores obtained from any of the other three tests. It can reasonably be assumed that a teacher or counselor is likely to behave differently toward a class whose mean IQ is thought to be 84 than toward one whose mean IQ is thought to be 102, since teachers' expectations regarding performance from two pupils who differed so markedly in tested aptitude would undoubtedly be different. Some of the dangers inherent in reports of scores that bear similar labels but that appear to measure different attributes with differing degrees of reliability could be lessened if the scores were called "Peabody IQs," "Columbia IQs," or "Binet IQs" rather than simply "IQs."

2. When difficulties are encountered by one tester with a particular combination of pupil and test, it may be prudent to shift both test and tester in subsequent attempts at measurement. The data reported here do not permit interactions among testers, tests, and pupils to be fully assessed, but the inferential evidence strongly suggests that significant interactions exist.

3. Further examination of interrelationships among pupils, testers, tests, and situational characteristics should be undertaken under conditions that permit these several effects to be separated. Additional analyses with currently available data are possible and may help clarify reasons for observed differences between scores, but the confusing effects of tester style and possible tester preferences for certain tests are inherent in the data and cannot be completely removed by statistical techniques. Experimental controls are necessary and, if possible, they should be used in future studies.

4. The costs of the PPVT and the CMMS are approximately comparable as measured by testing time and the price of materials. Mean IQs from the CMMS are more closely related to mean IQs obtained with the Stanford-Binet Scale or the Minnesota Pre-School Scale than are those from the PPVT. If a choice must be made between the PPVT and the CMMS as an instrument for obtaining an estimate of group aptitude, the CMMS appears to be a better choice. The best choice for an individual score is still undetermined.

PROJECT 2: COMPREHENSIVE SCHOOL-AGE COMPENSATORY PROGRAM

Introduction

The Comprehensive School-Age Compensatory Program provides for a variety of services to students in grades 1 through 12. It includes four subprojects:

1. Lowered Pupil Teacher Ratio and Class Size
2. In-Service Training
3. Supportive Auxiliary Services
4. Enrichment Experiences

Within each subproject, a number of specific services are defined. In general, the evaluation is addressed to the specific services that make up the subprojects. Table 16 identifies these compensatory services and shows the sources of data on which evaluation of the services is based.

Data Sources

The data on which the evaluation is based come from four sources: (1) the student data bank, (2) the elementary principal "market basket," (3) the teacher questionnaire, and (4) a special questionnaire to project personnel.

Student Data Bank

The student data bank contains information about individual students such as standardized test scores, academic and citizenship grades, attendance, amount of participation in compensatory elements, and personal background (age, sex, race, address, etc.).

Table 16

DATA SOURCES FOR EVALUATING PROGRAM ELEMENTS

Elements of the Comprehensive School Age Compensatory Program	Sources of Data: Student Data Bank	Elementary Principal "Market Basket"	Teacher Questionnaire	Special Questionnaires to Project Personnel
Lowered pupil teacher ratio and class size				
Saturation schools	X			
Compensatory classes 4-6	X	X	X	X
Compensatory classes 7-12	X		X	
Reduced class size grades 1-3	X	X		
Paid aides and volunteers	X	X	X	
Materials, equipment, and supplies		X	X	
Receiving school environment	X			
After school study centers	X	X	X	X
Nonpublic elementary schools				
In-service training				
In-service training			X	X
Resource personnel		X	X	X
Supportive auxiliary services				
Speech development and correction	X	X	X	X
Community teachers	X	X	X	X
Social workers	X	X	X	X
Librarian services		X	X	X
Reading clinic	X	X	X	X
Community resource teacher				X
Guidance service center				X
Language arts program in homes for abandoned and delinquent children				X
Enrichment experiences				
Field trips		X	X	

This report focuses on standardized test scores as the key dependent variable. Participation in the Compensatory Education Program, is the critical experimental variable, and participation information was drawn from the data bank. Other independent variables of concern include grade level, school of attendance, race, and sex. These data are also stored in the data bank and were drawn on in portions of the report.

Subsequent memorandum reports will deal with Compensatory Education Program effects on such criteria as teacher-assigned grades, attendance, in-school behavior, and other overt areas of performance for which adequate measures can be obtained. As noted, however, the present report deals with students' performance on standardized tests as direct criteria of program effects.

Elementary Principal "Market Basket"

The principal "market basket" is a questionnaire in which each principal of an elementary school in the Compensatory Education Program target area indicated his preferences for program elements by selecting imaginary "purchases" within a set of three fixed total budgets. It drew its name, "market basket," from the shopper analogy. The objective of the instrument was to determine principals' preferences and strengths of preferences by forcing them to make budget allocation decisions.

Rather than being specifically centered on compensatory students, the "market basket" is centered on the schools. The principals' evaluations took into account perceived needs of not only compensatory students, but also of noncompensatory students and the schools' staffs. This total school emphasis is consistent with the compensatory program's effort to affect all the children in a target area school.

A copy of the "market basket" questionnaire is presented in Appendix A (appendixes are bound separately). Briefly, each principal was given a budget from which he could make imaginary purchases of compensatory services for the coming school year. He was also provided a "price list" showing the cost of each of the services he was currently receiving for his school. He was then allowed to purchase the set of services he felt were most needed for his school up to the limit of his budget. Principals were also encouraged to describe, price, and purchase any new services that they felt were needed but that were not currently available. These unlisted services also had to fit within the budget limit. Each principal made three trips through the "market"--once with his present budget, once with 75 percent of his present budget, and once with 125 percent of his present budget.

Teacher Questionnaires

Teacher questionnaires were used in both elementary and secondary schools. Each level had a different version. The results of these questionnaires provide a teacher's view of how his task is affected when his students receive compensatory services. The questionnaires and a tabulation of the responses are given in Appendix B for elementary schools and Appendix C for junior and senior high schools. Results from appropriate sections of the questionnaires are drawn on in the evaluation of each service.

Questionnaires to Project Personnel

The fourth source of evaluative data is reports by project personnel for the specialized compensatory services. Community teachers, speech therapists, directors of after school study centers, librarians, and other specialized personnel contributed to segments of the research design. Questionnaires were developed for each type of service and they generally asked three questions: (1) "what did you try to do?," (2) "how successful were you?," and (3) "what could help you do a better job next year?" The responses to these questionnaires tended to assume that the service provided is needed and dealt with questions of how the service can be improved to make it even more valuable to the students. A number of these questionnaires are shown in Appendix E.

Lowered Pupil-Teacher Ratio and Class Size

The program to meet the general objective of lowered class size was originally conceived of in terms of four groups of schools in the San Francisco Unified School District: (1) four elementary saturation schools in which maximum services were provided; (2) twenty four target area elementary schools in which expanded, but not maximum, levels of services were provided; (3) twelve junior high schools; (4) five senior high schools; and (5) ten elementary schools which received fourth through sixth grade students from the four saturation schools. The greatest variety of programs was planned for the elementary schools. Thirteen nonpublic schools of the Archdiocese of San Francisco within the target area are also being provided certain compensatory services.

In execution, the distinctions between schools becomes somewhat blurred. For example, all saturation schools have after school study centers but so do some target area schools. Students in grades high 4 through high 6 are bused from the saturation schools to receiving schools outside the target area. These schools provide a different environment for the students. Also some of the compensatory services "follow" the saturation school students to the receiving schools where they are then used on the basis of need. These and other operational variations make it necessary to divide this subproject into a number of elements that will be evaluated separately. These elements were listed in Table 16.

Saturation Services Schools

Four elementary schools receive saturation services. Such services include prekindergarten centers, lowered class size, compensatory teachers, speech therapists, community teachers, social workers, paid and volunteer aides, after school study centers, cultural enrichment experience, equipment, and an additional budget for the purchase of supplies. None of these factors is unique to the saturation school; the amount and range of service available are simply greater. The first evaluation of saturation schools, therefore, is on a total basis--does it make a difference, on the average, for a student to be in a saturation school? No attempt is made here to look at the effect of particular services, such as speech therapy, since this will be examined in later analyses.

To provide the reduced class size planned for the saturation schools, it was necessary to reduce the total school enrollment. This was done by busing the upper grades from these schools to receiving schools of which all but one were outside the target area. The remaining grades were limited to kindergarten through low 4. Since no compensatory services are specifically aimed at kindergarten, it was decided to analyze the saturation schools grades 1-3 in conjunction with the reduced class size in the target area schools 1-3. Therefore, the evaluation of the saturation school program is included in the section on Lowered Class Size in Target Schools, Grades 1, 2, and 3. The effect on pupils in grades 4 through 6 will be covered in a subsequent section. Neither comparison is affected by the prekindergarten program because it will not be until the 1967-68 school year that the 1965-66 prekindergarten children reach the first grade.

Lowered Class Size in Target Schools, Grades 1, 2, and 3

The 24 target area schools have had their class sizes reduced in grades 1, 2, and 3 by the assignment of additional teaching personnel to the school. The formula for reductions was four students per class in both saturation and target area schools. A majority of the lowered class size teaching positions were financed with funds provided by State of California, Senate Bill 28, 1966. No differentiation in this evaluation is possible or desirable on the basis of the source of funds.

The district-established class size formulas for grades 1, 2, and 3 are:

Grade	Noncompensatory Schools	Target Area Schools and Saturation Schools
1	26	22
2	31	27
3	31	27

Reductions were achieved by dividing the students among the increased number of teachers, thereby reducing the size of each class over the entire day. In the saturation schools, the formula or lower levels were obtained. However, in some cases in target area schools, the facilities of the school would not permit the creation of additional full-time classes. (This condition would have occurred in saturation schools if students had not been bused out from the higher grades). In such cases, "ratio teachers" were assigned to lower the student-teacher ratio for the school, although not for individual classes. These teachers take a small number of students out of the classes each hour for special help, usually in reading. In practice, the effect of ratio teachers is much like that of the compensatory teacher, and the effect on individual students will be evaluated in conjunction with the compensatory teachers.

In summary, the reduced class size formula is the same for both saturation and target area schools. In practice, however, the saturation schools often achieve lower than formula levels because of the space made available by busing out higher grade pupils. Target area schools do not have this space flexibility. In addition, the saturation schools have a number of special services while, in the target area schools, the special services are not as intensive and are generally directed toward grades 4 through 6.

Achievement Test Data. The effect of the program in the saturation and target area schools can be analyzed with the results of the state-mandated and district testing in May 1966 and May 1967 at grades high 1, high 2, and high 3. These are shown in Table 17, which contains average total reading scores expressed in grade equivalents. Thus, a score of 1.444 in high 2 in May 1966 should be interpreted as the average student scoring at the 1st grade, 4 and 44/100ths month level compared with the norm of 1st grade, 9th month level.

Table 17

AVERAGE TOTAL READING SCORES IN GRADE EQUIVALENTS IN GRADES 1, 2, AND 3

	Saturation Schools				Target Area Schools			
Grade	May 1966	May 1967	1966-67 Mean Difference	Statistical Significance	May 1966	May 1967	1966-67 Mean Difference	Statistical Significance
High 1	1.444	1.575	0.131	p <.001	1.528	1.517	0.011	n.s.
High 2	1.969	2.245	0.276	p <.001	2.088	2.126	0.041	n.s.
High 3	2.442*	2.528	0.086	n.s.†	2.542*	2.651	0.119	p <.001†

---

n.s. = not significant.

* For high 3 in May 1966, only the grade equivalent scores for paragraph and word meaning separately were available. These were 2.49 and 2.428 for the saturation schools, respectively, and 2.568 and 2.480 for the target schools, respectively. The mean total reading scores were obtained by separately converting mean grade equivalent scores to mean raw scores, adding the word meaning and paragraph meaning raw scores, and using the total reading score conversion table to estimate an average total reading score.

† The standard deviation of the high 3, May 1966 distribution was estimated from the high 3, May 1967 distribution. This is a conservative estimate since the nature of the distribution is such that the higher the mean, the larger the standard deviation.

Statistical tests of the differences between the saturation and target area schools' 1966 to 1967 average gains were also performed:

1. High 1: Saturation schools showed a greater mean gain than the target area schools. This difference is significant by "t" test at the .001 level.

2. High 2: Saturation schools showed a greater mean gain than the target schools. This difference is significant by "t" test at the .001 level.

3. High 3: Target area schools showed a greater mean gain than the saturation schools, but the difference is not statistically significant.

The statistical tests run on the mean data are based on the assumption of reasonably normal distributions of test scores. However, the distributions, particularly at high 2 and high 3, are highly skewed toward higher grade equivalent scores. Therefore, an analysis was also made of median data as shown in Table 18.

Analysis. The first full-year program in the saturation schools appears to be making a statistically significant improvement in total reading scores on the Stanford Achievement Test (reading) compared with the half-year program in the spring of 1966. On the basis of the median data (which probably are more appropriate to the nonnormal distributions), the gains appear to increase with grade level. However, grade level is highly correlated with the amount of retardation from norm--the higher the grade, the more months of retardation. Therefore, from these data, it is not clear if the grade level or degree of retardation is the factor in program effectiveness.*

The saturation program has not yet succeeded in bringing the students up to grade level in reading achievement. However, the long term effects should be better than those shown under the May 1967 columns. In 1967-68, the first graders presumably will be more able because of their spring 1966 prekindergarten; many first graders each year thereafter will also have experienced a full year of prekindergarten. The second graders should start off higher because of their improvement in the first grade as should third graders. Even without prekindergarten, if the magnitude

---

* Future analyses will attempt to assess these effects.

Table 18

MEDIAN TOTAL READING SCORES IN GRADE EQUIVALENTS
IN GRADES 1, 2, AND 3

	Saturation Schools				Target Area Schools			
Grade	May 1966	May 1967	1966-67 Median Difference	Statistical Significance*	May 1966	May 1967	1966-67 Median Difference	Statistical Significance*
High 1	1.334	1.480	0.146	$p < .001$	1.431	1.434	0.003	n.s.
High 2	1.764	2.000	0.236	$p < .01$	1.839	1.877	0.038	n.s.
High 3	2.195†	2.481	0.286	n.a.	2.377†	2.517	0.140	n.a.

---

n.s. = not significant; n.a. = not available.

* The statistical test is based on a chi square test of a 2 x 2 contingency table.

† The same general method described in Table 17 for means was used to obtain median total reading for high 3 in May 1966. However, due to this, it was not possible to median-test gains in high 3 for statistical significance.

of median gain is maintained at each grade level, the third graders in May 1969 will be more than 6.1/2 months ahead of the third graders in May 1966.

Two opposing forces will affect this prediction. On the one hand, with more able students and a staff that has learned to improve its compensatory services, the gains should be higher. However, the influx and outflux of students in the saturation schools will mean that an appreciable portion of the 1968-69 third grade will not have had two previous years of saturation services, thereby presumably diluting the effects of the program.

For the target area schools, the results are less encouraging. At the first and second grade levels, there has been no statistically significant effect. Only at the third grade level is there a statistically significant effect. The slightly lower de facto class sizes in the saturation schools may account for the variation in program effectiveness between saturation and target area schools for grades 1 and 2. However, third grade students in target area schools are much more likely to receive some of the other special services available in these schools than are first and second graders. At grade 3, target area pupils exceeded saturation service school pupils. Therefore, the following is proposed as a conjecture for particular analysis during the coming year.

To be effective, reduced class size of the amounts available under formula must be supported by an increase in special services. If this conjecture can be verified, then changes in program design should be considered.

Principal "Market Basket". Principal "market basket" purchases plus principals' comments clearly show that reduced class size is a priority item to them. The average amount of compensatory service received by each of the 24 target schools in 1966-67 amounted to 3,555 units* of which 1,000 units went to purchase one teacher for a reduced size class. Given freedom of choice, the principals reallocated their 1966-67 budget to purchase 17 percent more reduced class size services.*

---

* See Appendix A for a sample of the "market basket" questionnaire. The "unit," as an arbitrary substitute for dollars, is explained in the form. Briefly, all services were "priced" with reference to one teacher for one year who was valued at 1,000 "units."

Principals were also asked to select a "market basket" with a 25 percent smaller budget and a 25 percent larger budget than at present. With the 25 percent smaller budget, the reduced class size services declined from 1966-67 expenditures by 6 percent, or 23 percent from the adjusted budget. Thus, the change from present allocation was minimal, but given a reallocation of present resources, the drop was proportional to the budget decrease.

For the 25 percent increase in budget, the allocation was increased 65 percent from the current level or 48 percent (that is, 65 percent-17 percent) from the present budget as reallocated. The clear indication is that principals would use most of their increase in funds to reduce class size rather than to add other special services. Since there is a common tendency to not want to eliminate what is presently functioning, the use of the 25 percent increase in budget can be assumed to most clearly portray principals' priorities for compensatory services. By this yardstick, a general reduction in class size is seen as much more important by principals than are added special services.

However, there is not unanimity among principals. At all budget levels, there was one or more principals who chose not to purchase reduced class size service. The distribution of purchases is shown in Table 19. (In reading the table, it should be recalled that the current budget provides one reduced class size teacher.)

The principals were also asked to describe how they would use the services of these regular teachers and any reduced class size teachers. There is little unanimity on the best distribution of class size over the first through sixth grades. Table 20 gives the range of class sizes and any special features (e.g., aides, team teaching), that different principals proposed. In every case the smallest classes were in the first grade and the largest in the sixth grade. However, as can be seen, there is considerable variation among principals in their ideas of appropriate class sizes by grade level--especially when they can suggest additional supporting services.

---

* The purchase decisions of the four saturation school principals are shown in Appendix A. However, they are not analyzed here because the small number makes the analysis too dependent on the feelings of a single principal.

Table 19

PRINCIPALS' SELECTION OF REDUCED CLASS SIZE TEACHERS

	Number Additional Teachers Preferred Under Different Budget Limits		
	Current Budget	25% Decrease	25% Increase
Zero teachers	4	6	1
One teacher	14	13	12
Two teachers	2	4	6
Three teachers or more	3	0	4

Note: Only 23 principals answered since one principal has two schools and answered only once.

Table 20

CLASS SIZE DISTRIBUTIONS PROPOSED BY PRINCIPALS IN THE "MARKET BASKET" PROBLEM
(1966-67 Budget)

School*	Smallest	Largest	Range	No. of Teachers Used to Reduce Class Size	Use of Aides in Classroom Proposed
11†	20	36	16	0	No
33	20	36	16	1	Yes
12‡	22	35	13	0	Yes
26	22	35	13	1	Yes
18	22	34	12	1	Yes
41	22	32	10	2	No
13	23	29	6	3	No
43§	24	30	6	1	No
03	25	35	10	0	Yes
14	25	36	10	1	Yes
10	25	34	9	0	No
08	25	33	8	1	No
37	25	33	8	1	Yes
09**	25	32	7	1	Yes
27	25	30	5	1	Yes
15	25	27	2	3	No
25	26	32	6	1	Yes
07	26	30	4	1	No

---

* It was necessary to leave 5 schools out because they improperly completed the class size distributions

† One 1st grade of 20 pupils for non-English speaking students--others have 24 students.

‡ Compensatory teacher in team teaching role.

§ Departmentalize along 3-4 split.

** Plans to use flexible groupings.

Compensatory Classes, Grades 4-6

In grades 4 to 6, the pupil-teacher ratio is reduced by providing special classes for designated compensatory students. These classes are 50 minutes long and have 12 students, although some classes are smaller and others slightly larger. The classes are directed toward language arts skills or English as a second language depending on the needs of the classes. This program includes the public school students in the 24 target area and 4 saturation schools and nonpublic students in 8 of the 13 parochial schools in the target areas. This service is also offered in the 10 receiving schools at which 4th through 6th grades are bused into from the target area. All compensatory teachers are hired and supervised by SFUSD personnel. The program in the nonpublic schools did not become fully operational until February 1967 because of the difficulty in hiring compensatory teachers.

In the district's schools, nearly all of the grade 4 to 6 teachers responding to the elementary school teacher questionnaire reported having students in the compensatory classes. In addition, 55 percent of third grade teachers and 40 percent of the second grade teachers reported having students in these compensatory classes. Part of the selection of grades 2 and 3 students occurs in the saturation schools in which the fourth grade is the highest grade in the school. However, most of the grades 2 and 3 students in compensatory classes are not in saturation schools; their participation is due to flexibility in the program that allows individual principals to decide how best to serve the students in his school.

Students are selected for participation in compensatory classes on the basis of need and capability. The result is that a considerable variation occurs in the number of students taken from any particular class. The tabulation below shows this variation.

Number of Students in Classroom Who Regularly Attend a Compensatory Class	Percentage of Teachers Reporting One or More Students in Compensatory Class
1	5.1%
2	5.5
3	9.9
4	6.8
5	14.8
6-8	30.9
9-11	16.1
12-14	8.6
15 or more	2.3

These figures show that 72.7 percent of the classroom teachers have five or more students in compensatory classes. Thus, most classroom teachers (particularly at grades 4, 5 and 6) have compensatory teachers available to aid some or all of their students who are deficient in language arts.

Achievement Test Data. The reading test portion of various forms of the Stanford Achievement Test provided the student achievement criterion for evaluating program effects at grades 4 to 6. A detailed analysis of changes in reading achievement associated with participation in the Compensatory Education Program appears in a subsequent section entitled Changes in Reading Achievement in Grades Four through Twelve During 1966-67. Various tables and subsections treat grades 4 to 6 separately but they are also compared with other grades. In brief, findings relevant to grades 4 to 6 were:

1. The absolute gain in months by pupils participating in the program was less than that for nonparticipating pupils selected for comparison. The median gain for participating pupils was 5.3 months over the September-May period in contrast to 6.8 months for nonparticipating pupils. This difference was statistically significant. However, the nonparticipating student cannot be considered a control group in the classical sense.

2. Gains varied according to the level of initial reading ability as determined from September scores. Typically, the distribution of gains by level of initial score was U-shaped--pupils with the lower initial scores and pupils with the higher initial scores tended to gain more than pupils whose initial scores were in the midrange of the distribution.

3. The specific kind of program in which pupils participated (e.g., special reading class, other services) was not unequivocally related to the amount of gain in reading achievement; the relationships tended to be as expected but typically were not statistically significant.

4. Distributions of gain scores for participating pupils at grades 4 to 6 were negatively skewed; that is, the mean gain was less than the median gain.

5. An adjusted gain index that took account of gain in relation to the ratio of grade placement to initial score was computed for samples of participating and nonparticipating pupils at grades 4

to 6. There were no differences between the two groups on this index, suggesting that participating pupils were increasing their reading ability at approximately the same pace as their somewhat more able classmates who were not participating in the program.

6. The rate of gain by participating pupils in grades 4 to 6 was virtually the same as the rate for nonparticipating pupils (i.e., 1.0165 per month versus 1.0180 per month).

These and other findings are presented and discussed in detail later in the report.

Principal's "Market Basket." The way in which hypothetical budgets were allocated by elementary school principals to acquire compensatory teachers shows that:

1. One compensatory teacher is enough.

2. A majority of principals want one compensatory teacher.

3. In 3 out of the 23 schools, the compensatory classes are assigned a low value; no additional compensatory teacher services were purchased under any of the three budgets.

In total, the elementary schools would decrease their expenditure for the compensatory teacher within the present budget and would maintain approximately this level of expenditure for either an increased or a decreased budget. These figures are shown below.

	With Present Budget	With 25% Decrease	With 25% Increase
Percent change in total expenditures from current	-20%	-30%	-18%
Amount of compensatory teacher services purchased by number of schools			
No compensatory teacher	3	4	4
Partial compensatory teacher	4	6	3
1 compensatory teacher	16	13	15
2 compensatory teachers	0	0	1

With a few exceptions, the principals view the compensatory teacher as a highly valuable resource for assisting the classroom teacher with children retarded in language skill. The present allocation of one teacher per school seems close to optimal based on the principals' replies.*

Classroom Teacher Questionnaire. The elementary classroom teacher questionnaire contained three questions about compensatory classes. The first question regarding number of students in compensatory classes was reported in the introduction to this section. The responses to the evaluative questions (numbers 5 and 6 in the questionnaire) are shown below. The figures are based only on questionnaires from 222 teachers who indicated that one or more of their students attended a compensatory class. All percentages are calculated against that base.

A Great Deal	Some	Not at All	I Don't Know	No Answer	5. If one or more of your children regularly leaves your classroom to attend a compensatory class, have you noticed any changes in their:
13.9	49.3	28.3	6.7	1.8	general mood?
18.5	56.0	20.7	3.1	1.7	responsiveness in your class?
7.6	52.5	30.1	5.9	3.9	attentiveness in your class?
5.9	40.3	40.3	9.8	3.7	orderliness?
16.1	51.0	23.3	3.5	6.1	participation in class discussions?
19.8	50.6	22.9	3.5	3.2	willingness to share information?
13.9	49.3	26.1	8.5	2.2	readiness to ask for help?
13.9	58.8	17.0	4.4	5.9	general level of academic achievement?

---

* Elementary schools vary considerably in size. However, the principals were asked to base their answers on a given pupil population that was to be viewed as a scaled version of their actual school.

6. Are you sure the compensatory class was the major cause of those characteristics that improved?

38.6	Yes
52.1	No
9.3	No answer

When the changes noticed are ordered from highest to lowest based on the percentage reporting "a great deal" the following ordering appears:

1. Willingness to share information
2. Responsiveness in class
3. General level of academic achievement
4. Participation in class discussion
5. Readiness to ask for help
6. General mood
7. Attentiveness in class
8. Orderliness

This list suggests that the most noticeable effects of the compensatory class are making students intellectually more active and more willing to interact with the teacher and other students. Such general behavior as orderliness and general attentiveness are rated at the bottom of the list. The implication is that the compensatory class aids these children in participating more fully in some classroom situations (probably high interest situations similar to those in compensatory class) but not in all aspects of the regular classroom situation.

In other analyses, the score on each of the eight phrases was summed to create a total score from eight (All "a great deal") to thirty-two (All "I don't know"). When the overall score was cross-tabulated by either grade level or number of students taken from a class, no significant differences were observed. Thus, on the basis of the teacher questionnaire, the compensatory class is about equally effective at all grade levels.

It was thought that teachers' opinions of compensatory classes might be related to the number of students who were taken from their classes; that is, the greater the reduction in size of the regular class, the more favorable the teachers' opinion of the compensatory class. Analyses did not show this to be the case, however. One factor that may affect teachers' evaluations of compensatory classes is the disruption created by student movement. Conceivably, favorable reactions to reduction in the size of regular classes and unfavorable reactions to student movement counteract one another. The questionnaire data do not permit a direct test of this, however.

Compensatory Teacher Questionnaire. All the compensatory classes are similar in their size and duration and in the fact that the students are retarded in language arts skills. However, within these general characteristics, wide divergences exist as individual teachers attempt to develop the best program for their school--often the same teacher will have to vary the program considerably from period to period. A questionnaire was sent to all compensatory teachers to obtain a better description of the differences within the program.

The first question asked the compensatory teachers to categorize their students by main characteristics. Wide differences were noted from school to school. The overall figures are shown on the following page.

A clear division in the responses exists between compensatory teachers who have students whose second language is English and those who have students for whom this is not a problem. Most of the teachers who have students who are foreign born or who live in homes in which English is not spoken use techniques to compensate for the English as a second language problem.

A formal second language approach is thought to be more necessary for older children. Less formal general experience and vocabulary building techniques appear successful below the fifth grade. Teachers of older children generally request more help from teacher aides to develop their material and further individualize the instruction. Within this framework, the situations leading to the most successful and least successful experiences are highly varied. On the students' ability to return to the regular classroom full time, one teacher felt that nearly half her class could return to normal classroom work. Other teachers, however, reported in the range of "none" to "10" students, although all felt that most could eventually return to classroom work.

Main Characteristic of Student	Number of Students	Percent of Students
Has average ability but misdeveloped skills	968	31.2%
Is slow learner who is consistently passed by his class	504	16.2
Is foreign born, and English is second language	548	17.4
Has average ability but comes from a home in which English is second language	354	11.4
Has emotional problems that interfere with his behavior and therefore his promotion and grouping	344	11.1
Has extracurricular problems causing frequent absences and consequent academic problems	137	4.4
Other	250	8.1
Total	3,105	100.0%

For the majority of students, English is the native language of both students and parents. While a variety of approaches is used, teachers generally strive to develop high interest with varied material that students help choose. Moreover, to establish contact with the student, teachers often use the compensatory class to allow the student to "have someone interested in what he wants to say" or "allow the students to get things off their chests" before trying to "teach."

The most commonly reported least successful experiences refer to formal programs, running an entire class on only one subject, information-oriented and teacher-originated classes, too little variety, and so forth. As one teacher said: "Whenever I found myself getting more wrapped up in subject matter than the children's changing moods, interest, or needs, things fell apart. Flexibility should be the first rule I've learned."

If the regular classroom situation is evaluated against this requirement of flexibility, the implications for students are somewhat bleak. While many regular classroom teachers undoubtedly favor an individualized and flexible approach, with present classroom sizes, teaching materials, and instructional requirements, the philosophy of the compensatory classes is difficult to implement in the regular classroom. If students can once be motivated in compensatory classes or in regular classes, they may be able to carry on within the structure of the regular class, but this is a limited hope. Hopefully, effects will be observable next year as compensatory students are graduated to the regular classroom in elementary or junior high school.

Other comments by compensatory teachers revealed that teacher aides would generally be welcome. In addition, most compensatory teachers are making maximum possible use of the community teacher in their school to forge home-school contact for their students. This service is highly rated by compensatory teachers.

As for graduation from the class at the end of the 1966-67 school year, few teachers report more than 10 out of 60 of their students could operate in the normal classroom and even for these students, teachers express fears of possible retrogression.

Reduced Class Size in Junior and Senior High Schools

The reduced class size program represents nearly the entire compensatory program at secondary school levels. Additional services such as teacher aides, reading clinic, curriculum resource personnel, and instructional equipment represent less than 5 percent of the program. The evaluation of the reduced class size program therefore effectively represents the evaluation of the compensatory program at the junior and senior high school level.

The official criteria for selection of students in junior high school for the compensatory program in order of assigned importance are the following:

1. Teacher recommendation and judgment.

2. A one and one half year spread between the nonlanguage IQ and the language IQ with the nonlanguage IQ being the higher.

3. Reading retardation (as measured by standardized tests) of more than one and one half years.

4. Nonlanguage IQ above 85.

Some minor variations occurred in the senior high criteria.

The official guidelines for reduction in class size at the secondary level places the limit at 15 students per class in junior high school and 18 students per class in senior high school. In operation, the junior high compensatory classes averaged 15.7 students per class, with a high of 23 and a low of 6. The senior high compensatory classes averaged 14.9 students per class, with a high of 23 and a low of 9.

A number of variations occurred in the intensity of the services offered to students. At one extreme, a junior high school classified all its students as "compensatory" and reduced all its class sizes a "little bit"; its mean class size necessarily far exceeded 15 students per class and is not included in the above average compensatory class size for junior high. At the other extreme, a senior high school decided to concentrate its services by reducing its class sizes to 18 and limiting the number of students selected so that every compensatory student had four compensatory classes per day.

Obviously, different philosophies have operated in creating these two extremes. The second presumably will be of greater direct benefit to the compensatory student. However, which is of greater benefit to all target area students over both the short and long term is uncertain.

A complete analysis of the effects of interschool difference is in process but this evaluation will limit its analysis of program effectiveness to the general characteristics of the program by class level and the degree of participation. The first phase of the evaluation will focus on the answers received from a questionnaire sent regular teachers, compensatory teachers, administrators, and counselors. The second phase of the evaluation will link student participation in the program to changes between tests-retests on the Gates-MacGinitie Reading Survey. The latter phase is covered in the next section, Changes in Reading Achievement in Grades Four Through Twelve During 1966-67.

Questionnaire Evaluation. A copy of the junior and senior high questionnaire is found in Appendix C. For purposes of analysis, the questionnaires were divided into six groups: (1) by level (junior high and senior high) and (2) groups of respondents (compensatory teacher, regular teacher, and administrators and counselors).*

The number of responses in each group were:

Junior high compensatory teachers	36
Regular teachers	372
Administrators and counselors	41
Senior high compensatory teachers	28
Regular teachers	167
Administrators and counselors	15

An early question concerned selection procedures:

"Is the present method of selecting ESEA (compensatory) students generally satisfactory?" The answers were:

	Respondents Answering Yes† (percent)	Respondents Answering No† (percent)	Respondents Not Answering (percent)
Junior high ESEA teachers	81.8%	18.2%	8.4%
Junior high regular teachers	73.6	26.4	25.8
Junior high administrators and counselors	89.7	10.3	4.9
Senior high ESEA teachers	71.4	28.6	--
Senior high regular teachers	66.2	33.8	25.8
Senior high administrators and counselors	60.0	40.0	--

---

* If the respondent taught any compensatory classes, he was classified as a compensatory teacher. If he taught some regular classes, but no compensatory classes he was classified as a regular teacher. The third group contained those who had no teaching duties.

† Percent of respondents who replied to the question.

Most respondents were agreeable to the present method of selection although there are differences between junior and senior high school personnel. The number of negative responses are sufficient to stimulate questioning of the selection procedures, especially when it is noted that more than one quarter of the ESEA teachers at senior high did not favor them.

Although no space for comment was provided after the question on selection, a number of respondents (mainly in senior high schools) wrote in comments that help explain the dissatisfaction that exists. A few of these comments expressed general dissatisfaction with compensatory programs such as: "Why should these kids be singled out for special help when they don't try anyway?" However, most spoke specifically about the criteria and their effect on the school. The following is a sample from the comments of the minority which objects to present selection criteria.

> For your information; pupils who are accepted in the compensatory program must show the following characteristics; good attendance, within the range of normal intelligence, good citizenship, etc. This eliminates those who need it most.
>
> Your program has taken the most studious pupils out of the remedial programs and created an intellectual vacuum in these classes resulting in a dumping ground for disciplining students and a near nonlearning situation. Result: Remedial means custodial care.
>
> The criteria for compensatory students eliminates the pupils who need it most.
>
> My criticism is that practically no help is offered to the boys and girls who need the most help. I mean the tardy, truant, belligerent, etc. No one seems to be interested in putting out a hand to these kids. They are left in remedial classes because the philosophy of the program excludes anyone who shows no desire in helping himself.

In contrast, the majority supports a compensatory program for disadvantaged--but not unwilling--youth. However, as the minority points out, even if the compensatory program is successful for the students in it, there are many needs yet unfilled.

On the question of the number of classes that compensatory students should have, answers from ESEA teachers and administrators--those presumably in the best position to know--were analyzed.

In junior high school, the modal response to the question: "In how many classes do ESEA students participate?", was three for ESEA teachers and two for administrators and counselors. For those who answered that the present number was not appropriate, the modal response was that three classes were best. Thus, those who had three classes per student were satisfied and those who had a number other than three wanted three classes per student.

ESEA teachers, administrators, and counselors in senior high school agreed that the present modal number of compensatory classes per student was two. For those who were dissatisfied with the present number, the modal reference was for three or four classes per student. On the average, both junior and senior high school staff feel that three or more classes per compensatory student are required for the program to be effective.

To summarize:

1. The majority of respondents believe that the present method of selecting ESEA students is satisfactory. However, a minority strongly feels that the students who most need help are being excluded and should not be.

2. On the average, ESEA class sizes are below the maximum class size, with an average of 15.7 students per class in junior high school and 14.9 students per class in senior high school.

3. Three or more compensatory classes per student are viewed as the best number. On the average, this number is generally more than currently programmed per student.

Another question regarding the organization of the program concerned the skills that ESEA teachers should possess. The responses of regular and ESEA teachers who rated the program as having "a great deal" of effect were examined. Both regular and ESEA teachers in junior and senior high school agreed in their ranking of the most valuable four skills and the least valuable five skills. The most valuable four skills were:

- Has genuine affection for students

- Is interested in trying new materials and methods

- Understands the environmental factors of the culturally disadvantaged

- Has empathy toward persons from different cultural backgrounds

The least valuable five skills were:

- Has skill in audiovisual teaching techniques
- Has sound academic preparation in subject field
- Is interested in using community resources, i.e., guest speakers, enrichment trips, etc.
- Exhibits interest in professional growth, i.e., in-service courses, advanced work, and community participation
- Maintains discipline

The most valuable four skills relate the teacher to the persons being taught and the skills that are presumably needed to reach them. The least valuable five skills relate the teacher to methods or techniques of teaching. The "ideal" compensatory teachers are pictured as those who put higher priority on the student and his needs than on the curriculum or teaching methodology.

Subjects for future research concern (1) how well this profile matches the characteristics of compensatory teachers and (2) what differences other than those due to class size differentiate the way in which a compensatory class and a regular remedial class are taught.

The foregoing discussion has perhaps overemphasized differences and distinctions. All teachers should probably use the characteristics of their classes as the primary point of reference in determining their teaching methods. Furthermore, even one of the skills ranked least valuable--"has skills in audiovisual teaching techniques"--was rated by more than 25 percent of the regular and ESEA teachers as having "a great deal" of importance.

The effects of the program on the students were evaluated by the respondents in questions 9 and 10. The first analysis was based on the relative importance of the apparent effects as measured by the percentage of those who responded "a great deal." Responses from a number of different groups were compared--the ESEA teachers, the administrators and counselors, and four groups of regular teachers.

For the junior high school, improvement in academic achievement and in classroom behavior were at the top of the list of noticeable effects. Similarly, improvement in general school attendance and more mature behavior were at the bottom of the list. This is shown below:

1. High effect items
    1. More academic achievement than normally expected
    2. Better behavior in the classroom
2. Moderate effect items
    1. Improved attendance in specific classes
    2. Improved all-around citizenship
    3. Better attitude toward school
3. Low effect items
    1. Improvement in general school attendance
    2. Generally more mature behavior

The ordering within groupings in the above tabulation and in the one following is based on the order in which the question was asked and does not imply a ranking.

In senior high school, the same type of analysis was performed with the slightly different results shown below.

1. High effect items
    1. Improved attendance in specific classes
    2. Better behavior in classroom
2. Moderate effect items
    1. More academic achievement than normally expected
    2. Improvement in general school attendance
    3. Improved all-around citizenship
    4. Better attitude toward school

3. Low effect items

a. Generally more mature behavior

The percentage rankings on questions 9 and 10 by ESEA teachers and regular teachers (who reported "very often" observing ESEA students directly) is given below. From the point of view of contact, these two groups have the best opportunity to judge the students. The regular teachers who observed "very often" were a subsample of 54 out of 372 in junior high school and 13 out of 167 in senior high school. The figures shown are percentages of each of these groups that responded "a great deal" on the program effectiveness phrases.

	Percentage Responses of "A Great Deal"			
	Junior High		Senior High	
Effects Categories	Regular Teachers Reporting "Very Often" Observation	Compensatory Teachers	Regular Teachers Reporting "Very Often" Observation	Compensatory Teachers
More academic achievement than normally expected	29.6%	50.0%	23.1%	35.7%
Improvement in general school attendance	13.0	25.0	0.0	28.6
Improvement in specific classes	16.7	27.8	7.7	32.1
Better behavior in classroom	25.5	47.2	15.4	46.4
Generally more mature behavior	5.6	19.4	0.0	21.4
Improved all-around citizenship	14.8	27.8	0.0	32.1
Better attitude toward school	16.7	38.9	0.0	32.1

An order test (coefficient of concordance) shows no statistically significant difference in the ordering of qualities within and between junior and senior high schools. However, the junior high regular teachers in the "very often" subsample reflect more enthusiasm on every item than do their senior high counterparts.

Another question asked about students' attitudes toward participating in the program. The possible responses were:

1. Students like the program

2. Students have mixed feelings

3. Students dislike the program

4. I don't know

Less than half the responses indicated that the students liked the program. This finding was substantiated repeatedly for all groups in a wide variety of cross tabulations. On the following page are shown the percentages of the responses with "I don't know" and "no answers" eliminated for four groups. The unadjusted findings are given in Appendix D.

Where comments on this question were written in, they generally expressed that it was the "special class for dumb kids" that was being reacted against by the students. It is probable that when teachers sense that a majority of the students do not like the program, the potential effectiveness of the program is probably reduced by this reaction. More detailed information from both students and teachers is needed in this area to enable the program to be designed to reduce this reaction to a minimum. Enthusiasm for a class is one of the most important prerequisites to effective participation.

Summary ratings of the program were developed in questions 18, 22, and 23. The responses to these questions are given on the following page. These ratings give support to the program although differentiation between responses is shown. The most enthusiastic reaction is on the future of the program--it should be increased. On the question of value of the program, about half the respondents did not answer for one or another reason, and less than who did reply thought funds were being expended effectively. As might be expected, the ESEA teachers feel the strongest about increasing the program and its value, and the administrators are most positive about the effective use of the funds.

	Percentage of Responses		
	Students Like the Program	Students Have Mixed Feelings	Students Dislike the Program
Junior high compensatory teachers	39.4%	54.4%	6.1%
All regular teachers	31.2	62.5	6.2
Regular teachers reporting "A great deal" of benefit on question 1	44.8	51.7	3.4
Regular teachers reporting "very often" observation on question 8	31.1	53.3	15.6
Senior high compensatory teachers	48.0	52.0	0.0
All regular teachers	29.4	69.1	1.5
Regular teachers reporting "A great deal" of benefit on question 2	40.0	60.0	0.0
Regular teachers reporting "very often" observation on question 8	36.4	63.6	0.0

In review, the ratings of student changes and program success by teachers and other staff members are all quite positive. The most potentially serious problem lies in the feelings of the students toward the program as teachers perceive student attitudes.

Question 18: So far as you are aware, are ESEA Compensatory Program funds being expended effectively in your school?

Respondent	Very Effective	Fairly Effective	Not Effective	No Basis for Judging or No Answer
JHS compensatory teachers	33.3%	27.8%	5.6%	33.3%
JHS regular teachers	14.8	20.2	9.1	55.9
JHS administrators and counselors	46.3	31.7	2.4	19.6
SHS compensatory teachers	17.9	64.3	3.6	14.3
SHS regular teachers	12.0	26.9	9.6	51.5
SHS administrators and counselors	33.3	33.3	13.3	20.1

Question 22: Do you think the ESEA Program has been of value to your school?

Respondent	A Great Deal	Some	Not at All	I Don't Know or No Answer
JHS compensatory teachers	72.2%	16.7%	2.8%	8.3%
JHS regular teachers	31.2	35.5	5.4	27.9
JHS administrators and counselors	51.2	26.8	4.9	17.1
SHS compensatory teachers	78.6	17.9	0.0	3.5
SHS regular teachers	29.9	36.5	6.6	27.0
SHS administrators and counselors	33.3	40.0	6.7	20.0

Question 23: Do you think the ESEA Program should be:

Respondent	Increased	Remain the Same	Decreased	Discontinued	No Answer
JHS compensatory teachers	77.8%	11.1%	2.8%	2.8%	5.5%
JHS regular teachers	58.3	15.3	1.9	3.8	20.7
JHS administrators and counselors	70.7	14.6	0.0	2.4	12.3
SHS compensatory teachers	89.3	7.1	0.0	0.0	3.6
SHS regular teachers	55.7	13.2	3.6	7.2	20.3
SHS administrators and counselors	60.0	20.0	0.0	6.7	13.3

Changes in Reading Achievement in Grades 4 Through 12 During 1966-67

Scores from standardized tests in reading achievement were available for 13,600 pupils sampled from grades 1 through 12. Of this number, approximately 4,050 were participants in the ESEA Compensatory Education Program at grades 4 through 12 and the remainder were selected for comparison purposes. The overall testing program for the District during 1966-67 is summarized in Table 21.

Nonparticipating pupils cannot be considered as a control group in the classical meaning of "control." The decision as to whether a particular pupil would participate in the Compensatory Education Program was based on teacher judgment guided by broad criteria (e.g., achieving below grade level, IQ of 85 or more). In general, participating pupils were those who, in the judgment of their teachers, were most in need of, or were most likely to profit from, participation in some aspect of the Compensatory Education Program. Nonparticipating pupils whose performances were compared to that of participating pupils were selected in two different ways. In grades 4 through 7, nonparticipants were all target area pupils at these grade levels who were not selected for participation in the Compensatory Education Program; as a group, they were performing more nearly at or above grade level than were their classmates assigned to the Compensatory Education Program. In grades 8 through 12, nonparticipants were students characterized by their teachers as "on the fringe"--they were just enough different, in some characteristic or other, to be excluded from participation in the Compensatory Education Program.

Table 21

TESTING PROGRAM FOR SAN FRANCISCO UNIFIED SCHOOL DISTRICT
1966-67

Fall			Spring		
Grade Level	Sept/Oct '66 Test*	January '67 Test	Grade Level	February '67 Test	May/June '67 Test
L K			H K		Met R-A[a]
H K		Met R-A[a]	L 1	Met R-A[a]	
L 1	Met R-A[a]		H 1		LT - P1[b] SR - P1W[b]
H 1		LT - P1[b] SR - P1W[b]	L 2		SR - P1X[c-4]
L 2	SR - P1X[c-4]		H 2	SR - P1Y[c-3]	SR - P2W[b]
H 2	SR - P1X[c-4]	SR - P2W[b]	L 3		SR - P2Y[c-3]
L 3	SR - P2Y[c-4]		H 3	SR - P2Y[c-3]	LT - P2[b] SA - P2X[b]
H 3	SR - P2Y[c-4]	LT - P2[b] SA - P2X[b]	L 4		SR - P2Y[c]
L 4	SR - P2Y[c]		H 4	SR - P2X[c-1&3]	SR - P2X[c-2&4]
H 4	SR - I1W[c]		L 5	SR - I1X[c-1]	SR - I1X[c-2]
L 5	SR - I1W[c]		H 5	SR - I1x[c-1]	SR - I1X[c-2]
H 5	SR - I2W[c]		L 6	SR - I2X[c-1]	SR - I2X[c-2]
L 6	LT - D1[b] SA - 12w[b]		H 6	SR - I2X[c-1]	SR - I2X[c-2]
H 6	LT - D1[b] SA - I2W[b]		L 7	GM - D2[c-1]	GM - D2[c-2&3]
L 7	GM - D1[c] CTMM[a] SM - ADW[a]		H 7	GM - D2[c-1]	GM - D2[c-2&3]
H 7	GM - D1[c]		L 8	GM - D2[c-1] SR - ADW[a] SM - ADW[a]	GM - D2[c-2&3]
L 8	GM - D1[c] SR - ADW[a] SM - ADW[a]		H 8	GM - D2[c-1]	GM - D2[c-2&3]
H 8	GM - D1[c]		L 9	GM - E2[c-1] SM - ADW[a]	GM - E2[c-2&3]
L 9	GM - E1[c] SM - ADW[a]		H 9	GM - E2[c-1]	GM - E2[c-2&3]

Table 21 (continued)

Fall			Spring		
Grade Level	Sept/Oct '66 Test*	January '67 Test	Grade Level	February '67 Test	May/June '67 Test
H 9	GM - E1[c]		L 10	GM - E2[c-2]	GM - E2[c-1]
L 10	GM - E1[c] LT - G1[b] TA[b]		H 10	GM - E2[c-2]	GM - E2[c-1]
H 10	GM - E1[c] LT - G1[b] TA[b]		L 11	GM - E2[c-2]	GM - E2[c-1]
L 11	GM - E1[c]		H 11	GM - E2[c-2]	GM - E2[c-1]
H 11	GM - E1[c]		L 12	GM - E2[c-2]	GM - E2[c-1]
L 12	GM - E1[c]		H 12	GM - E2[c-2]	GM - E2[c-1]
H 12	GM - E1[c]		--		

Reason for testing:

a. San Francisco Unified School District testing.
b. California State mandated testing.
c. Additional testing for Compensatory Education Evaluation in Target Schools. (1, 2, 3, or 4 is school testing group as designated below. If no group number is shown with footnote c, all target schools are included.) Schools in which Stanford Research Institute administered tests were split into groups. Schools included in each group are as follows:

Elementary (grades K-6)

Group 1 - Bayview
Bret Harte
Buena Vista
Commodore Stockton
Emerson
Fairmount
Golden Gate
I.M. Scott
John McLaren
Laguna Honda
Marshall
Raphael Weill
Redding
Sir Francis Drake

Group 2 - Anza
B. Carmichael
Bryant
Burnett
Daniel Webster
Garfield
Hunters Point II
Jedediah Smith
John Muir
Lawton
Lincoln
Patrick Henry
R. L. Stevenson
Washington Irving

Group 3 - Hunters Point I
John Swett

Group 4 - Dudley Stone
Hawthorne

Table 21 (concluded)

Junior High (grades 7-9)

Group 1 - Everett
Horace Mann
Luther Burbank
Pelton
Roosevelt

Group 2 - Benjamin Franklin
Francisco
Marina
Portola

Group 3 - Aptos
Giannini
Presidio

Senior High (grades 10-12)

Group 1 - Galileo
Mission

Group 2 - Polytechnic
Woodrow Wilson
Samuel Gompers (incl. grade 9)

* Test abbreviation in table:

Met R-A	Metropolitan Readiness, Form A
LT	Lorge-Thorndyke
SR	Stanford Reading Tests
GM	Gates MacGinitie Reading Test
CTMM	California Test of Mental Maturity
SM	Stanford Math Test
SA	Stanford Achievement Test (full battery)
TA	Tests of Academic Progress, Reading Test (grade 10, Form 1)

Forms and level

P1	Primary I Battery
P2	Primary II Battery
I1	Intermediate I Battery
I2	Intermediate II Battery
D and E	Surveys of Gates MacGinitie (Forms 1, 2 or 3)
AD	Advanced Battery
W, X, Y	Forms of Stanford Reading and Achievement Tests
D1 and G1	Levels of Lorge Thorndyke

Direct comparisons between participants and nonparticipants are somewhat more appropriate for grades 8 through 12 than they are at grades 4 through 7. In neither case, however, is a comparison wholly defensible by a strict interpretation of the rules of sampling. Neither assignment to the program nor exclusion from it is random; pupils are purposely assigned specifically because their teachers think they will benefit from it, and others are excluded because they do not meet on some criteria.

Despite possible misinterpretation, the performances of participating and nonparticipating pupils are compared in this section and in Appendix D. It is natural to ask: "Does participation in the Compensatory Education Program make a difference?" Indeed, this is a central question in the whole evaluation effort. To try to answer that question, participants and nonparticipants have been grossly matched for their initial level of reading achievement. This leaves the array of other variables that could be expected to affect reading ability uncontrolled--general aptitude, language spoken in the home, interest in school, desire to learn, and so on. The analysis can be improved by multiple regression methods and the statistical technique of covarying on certain independent variables (e.g., intelligence) that are known to correlate with reading achievement or other criteria that may be used in subsequent evaluations. When such analyses are completed on the 1966-67 data, they will be reported in memoranda to the District. Statistical manipulations can only be made when measures are available on all relevant variables, however, and some of these, such as a reliable index of "student motivation," present difficult measurement problems.

Comparison of Scores

Two sets of scores are considered in this portion of the report. One set consists of correlated gain scores for 5,607 participating and nonparticipating pupils in grades 4 through 12. Each of these pupils was tested at two points during the school year--September and February or September and May. His "gain score" was the difference between the two measures expressed in grade equivalent terms. Of the total number of gain scores analyzed, 2,145 were from pupils participating in some way in the Compensatory Education Program and 3,462 were from pupils of grossly similar characteristics who were nonparticipants.

The second set of 13,600 scores includes all the foregoing pupils plus many additional ones for whom difference scores (i.e., September-February or September-May differences) were not computed. These scores are correlated but the degree of correlation is not known, since only mean scores by testing period have been considered in analyses thus far. Less emphasis is placed on these data in the following discussion than on the correlated gain scores previously described. These mean scores are relevant, however, because differences by testing period are to help explain the shape of the gain curves.

September to May Gains of Participants and Nonparticipants in a Compensatory Education Reading Program

An impression of the overall effects of the Compensatory Education Reading programs for grades 4 through 12 can be gained from Table 22. The table shows that the median gain from September to May for 1,037 pupils who participated in a Compensatory Education reading program was 5.0 months while the median gain for 1,447 nonparticipating pupils was 6.8 months. The limitation regarding the appropriateness of direct comparisons between these two groups deserves re-emphasis--although the two groups of pupils shared certain characteristics (e.g., they came from similar neighborhoods and attended the same schools), they cannot be considered as randomly drawn samples of the same parent population. Note, in particular, that a substantially smaller fraction of the pupils who participated in the ESEA reading program were performing near or above grade level in September--174 of 1,037 (16.8 percent) in contrast to 453 of 1,447 (31.3 percent).

Three features of Table 22 are especially prominent. First are the expected differences in gains between the two groups of pupils. Overall, as well as within levels of initial reading achievement, pupils who participated in the program tended not to gain as many months in reading achievement as did the nonparticipating pupils. This difference is statistically significant ($p < .001$).

Table 22

SEPTEMBER 1966 TO MAY 1967 GAINS IN STANFORD AND GATES-McGINITIE READING TEST GRADE EQUIVALENT SCORES FOR SAMPLES OF PUPILS IN GRADES 4 THROUGH 12

	Pupil's Grade Equivalent Scores From September Testing			
	Much Below Present Grade	Slightly Below Present Grade	Near or Above Present Grade	All Pupils
Pupils in ESEA reading program				
25% gained this many months or more	11.6	11.2	15.8	12.1
50% gained this many months or more	6.3	4.1	6.5	5.0
75% gained this many months or more	2.6	-2.2	-2.8	-1.4
Number of pupils	236.0	627.0	174.0	1,037.0
Pupils not in ESEA reading program				
25% gained this many months or more	13.4	11.7	15.2	13.3
50% gained this many months or more	7.8	5.7	8.3	6.8
75% gained this many months or more	3.9	0.2	0.4	1.2
Number of pupils	259.0	735.0	453.0	1,447.0

Statistical Note:

1. Differences in gains according to initial levels within both groups:
   a. ESEA pupils; chi square = 70.250, $p < .001$ (df = 8).
   b. Non-ESEA pupils; chi square = 68.122, $p < .001$ (df = 8).

2. Differences in gains between groups over all levels of initial score: chi square = 29.734, $p < .001$ (df = 4).

A second feature is the high degree of overlap between the two groups and the broad range of gains within both groups. For the participating pupils, the middle 50 percent ranged from a loss of 1.4 months to a gain of 12.1 months. A comparable spread in gain scores from 1.2 months to 13.3 months was displayed by nonparticipating pupils. The actual spread in gain scores was even greater, since values shown in Table 22 are only for the first, second, and third quartile points in the distributions. Note also that the greatest spread was displayed by pupils who were highest initially while those who were lowest showed the least spread.

The third feature of the table is the curvilinear shape of both distributions. For both groups of pupils, those who were near the extremes according to initial or September reading scores tended to experience the greatest gains.* Regardless of possible causes of these scores by pupils at the upper and lower extremes, the fact remains that the greatest relative gains in both groups were made by pupils who were initially lowest and highest at each grade level.

The pattern revealed in Table 22 generally is affirmed in Table 23, which shows the gains made by pupils in grades 4 through 6. Again, gains of nonparticipating pupils tended to be greater than those of participating pupils ($p < .005$). Among nonparticipating pupils, differences in gain according to initial levels were also evident ($p < .05$). For participating pupils, this latter pattern was not so clearcut, but it should be noted that only 12 of the 252 pupils (4.8 percent) were reading near or above their grade placement in September; with so few cases in this category, caution in interpretation is warranted. The curvilinear form of the gain scores also can be seen--the pupils who deviated most initially showed the greatest gains. Finally, the high degree of overlap between the two distributions is also apparent.

---

* Part of this may be attributed to aspects of measurement and test design. One aspect--sometimes called leveling or the regression effect--is a consequence of lack of perfect reliability in the tests themselves. Successive administrations of the same unreliable test to the same individuals typically show some drift toward the mean of the group by persons initially at the extremes. Thus, gains may be overestimated for persons initially near the low end of the distribution and underestimated for persons initially near the high end of the distribution. A second, more technical, problem is in the inherent ambiguity of grade equivalent scores. When grade equivalent scores are established by the statistical regression of score on grade placement, for example, pupils below the mean on an unreliable test will have an exaggeratedly high score. This exaggeration is independent of any tendency for individuals to "regress toward the mean" in successive testings.

Table 23

SEPTEMBER 1966 TO MAY 1967 GAINS IN STANFORD READING TEST GRADE EQUIVALENT SCORES FOR SAMPLES OF PUPILS IN GRADES 4 THROUGH 6

	Pupil's Grade Equivalent Scores From September Testing			
	Much Below Present Grade	Slightly Below Present Grade	Near or Above Present Grade	All Pupils
Pupils in ESEA reading program				
25% gained this many months or more	10.2	8.0	13.8	9.7
50% gained this many months or more	5.8	4.2	10.7	5.3
75% gained this many months or more	2.2	-1.0	5.5	0.9
Number of pupils	146.0	94.0	12.0	252.0
Pupils not in ESEA reading program				
25% gained this many months or more	12.1	11.6	12.2	11.9
50% gained this many months or more	7.2	6.3	7.5	6.8
75% gained this many months or more	3.7	2.3	3.1	3.1
Number of pupils	222.0	428.0	185.0	835.0

Statistical Note

1. Differences in gains according to initial levels within both groups:
   a. ESEA pupils; chi square = 6.808 , $p > .10$ (df = 4).
   b. Non-ESEA pupils; chi square = 15.672 , $p < .05$ (df = 8).

2. Differences in gains between groups over all levels of initial score: chi square = 14.970, $p < .005$ (df = 4).

Table 24 indicates the performance of pupils from grades 7 through 9. Overall, participating pupils gained less than their nonparticipating cohorts ($p < .01$), and differential gains according to initial scores were statistically other than chance ($p < .001$ in both cases). Curvilinearity and overlap between distributions are also apparent.

The picture in grades 10 through 12, as shown in Table 25, differs somewhat from that in the preceding tables. Rather striking gains were displayed by pupils who were initially lowest in reading achievement whereas those pupils who were initially highest were about as likely to show losses as gains in their May scores. Explanations for this may reside in differences in program emphasis at the senior high school level and in differences among pupils at this level in contrast to programs and pupils at elementary and junior high levels. Also, participating and nonparticipating groups of pupils did not differ in their gain patterns at the senior high school level.

September to February and September to May Gains in Reading Achievement for Participants and Nonparticipants in All Components of the Compensatory Education Program

Appendix D contains tables that summarize half-year and whole-year gains in reading achievement by pupils from grade high 4 through 10 and whole-year gains by pupils in grades 11 and 12. These tables display differential gains according to the degree and kind of participation in the Compensatory Education Program. For grades 4 through 6, three levels of pupil participation were considered: (1) participation in a compensatory reading program, (2) involvement in other program components such as speech therapy, a community teacher or social worker, etc.; and (3) participation in both the reading program and some other program component. In grades 7 through 12, "high" and "low" levels of participation are differentiated. "High" means participation in more than two compensatory classes during the year while "low" means participation in one or two compensatory classes.

Among pupils participating in the Compensatory Education Program, greater gains in reading achievement scores should be demonstrated by those with the greatest involvement in the program and, in particular, by those participating in activities directly relevant to reading. Further, such gains should be more pronounced over the September-May period than over the September-February period. Thus, for grades 4 through 6, participation in an ESEA reading program or in a combination of ESEA

Table 24

SEPTEMBER 1966 TO MAY 1967 GAINS IN GATES-McGINITIE READING SURVEY GRADE EQUIVALENT SCORES FOR SAMPLES OF PUPILS IN GRADES 7 THROUGH 9

	Pupils' Grade Equivalent Scores From September Testing			
	Much Below Present Grade	Slightly Below Present Grade	Near or Above Present Grade	All Pupils
Pupils in ESEA reading program				
25% gained this many months or more	10.6	11.4	17.2	13.3
50% gained this many months or more	5.8	4.3	7.9	5.3
75% gained this many months or more	3.1	-1.8	-0.5	-1.2
Number of Pupils	51.0	266.0	114.0	431.0
Pupils not in ESEA reading program				
25% gained this many months or more	19.0	12.3	17.7	16.7
50% gained this many months or more	8.0	5.3	10.7	8.0
75% gained this many months or more	5.1	0	0.4	0.6
Number of pupils	24.0	164.0	228.0	416.0

Statistical Note:

1. Differences in gains according to initial levels within both groups:
   a. ESEA pupils; chi square = 41.655 , $p < .001$ (df = 8).
   b. Non-ESEA pupils; chi square = 33.595 , $p < .001$ (df = 4).

2. Differences in gains between groups over all levels of initial score: chi square = 13.664, $p < .01$ (df = 4).

Table 25

SEPTEMBER 1966 TO MAY 1967 GAINS IN GATES-McGINITIES READING SURVEY GRADE EQUIVALENT SCORES FOR SAMPLES OF PUPILS IN GRADES 9 THROUGH 12

	Pupils' Grade Equivalent Scores From September Testing			
	Much Below Present Grade	Slightly Below Present Grade	Near or Above Present Grade	All Pupils
Pupils in ESEA reading program				
25% gained this many months or more	18.9	13.5	9.0	14.7
50% gained this many months or more	14.1	4.2	3.0	4.2
75% gained this many months or more	2.8	-3.3	-7.0	-3.4
Number of pupils	39.0	267.0	48.0	354.0
Pupils not in ESEA reading program				
25% gained this many months or more	19.3	11.7	9.0	12.5
50% gained this many months or more	15.6	2.8	-1.0	3.2
75% gained this many months or more	9.4	-3.9	-9.6	-4.3
Number of pupils	13.0	143.0	40.0	196.0

Statistical Note:

1. Differences in gains according to initial levels within both groups:
   a. ESEA pupils; chi square = 26.434, $p < .001$ (df = 6).
   b. Non-ESEA pupils; chi square = 10.897, $p < .005$ (df = 2).

2. Differences in gains between groups over all levels of initial score: chi square = 7.011, $p > .10$ (df = 4).

reading and other services should lead to greater gains than should involvement with auxiliary services and other program components. Similarly, at grades 7 through 12, the greatest gains should be observed among pupils classified as "high" participators.

Gain scores reported in Appendix D lend some support to these expectations but the evidence is statistically weak. Table 26 provides an overall summary of the more detailed data in Appendix D.

Table 26 shows that the program elements did not differ greatly from one another in their association with gains in reading achievement scores. The probabilities of chance differences were consistently high and, in fact, were nearly what one would expect on a random basis from 18 tests of statistical significance. In the eight cases where both September-February and September-May gains were analyzed, however, five of these showed that the program elements ranked in the expected order for the September-May period (i.e., for low 7, low and high 8, low and high 5, low and high 6, and high 7). In three of these five cases--low 7, low and high 8, and low and high 5--the expected ranking prevailed for both the September-February and September-May periods. In the other two instances (low and high 6, high 7), the ranking shifted in the expected direction between the September-February and the September-May periods. In only one case--low and high 9--did the program elements rank in the direction opposite of expectation during both the half-year and whole-year periods of observation.

Comparisons of Four Somewhat Different Measures of Gain in Reading Achievement Displayed by Participating and Nonparticipating Pupils

Reading achievement scores expressed in grade equivalent terms were entered in the student data bank for nearly 11,000 pupils in grades 4 through 10. Of this total, approximately 30 percent were pupils participating to some degree in the Compensatory Education Program. Group means and standard deviations were calculated for each classifiable program element within each half-grade level and testing period. The actual number of scores entered by testing period for pupils in grades 4 through 10 is shown on the following page.

Table 26

SUMMARY OF ASSOCIATION BETWEEN PROGRAM PARTICIPATION AND GAINS IN READING ACHIEVEMENT BY PUPILS AT VARIOUS GRADE LEVELS OVER HALF-YEAR AND WHOLE-YEAR PERIODS*

Grade Level	Period of Observation	Programs Ranked According to Observed Gains	Probability of Nonchance Differences Between Groups of Participating Pupils†
High 4	Sept-Feb	Reading > Other ≥ Both	$.10 > p > .05$
	Sept-May	Other > Reading ≧ Both	$p > .25$
Low and High 5	Sept-Feb	Reading ≧ Other > Both	$p > .25$
	Sept-May	Reading > Both > Other	$.25 > p > .10$
Low and High 6	Sept-Feb	Other ≧ Reading > Both	$p > .75$
	Sept-May	Reading ≧ Both > Other	$p > .50$
Low 7	Sept-Feb	High ≧ Low	$p > .75$
	Sept-May	High > Low	$.25 > p > .10$
High 7	Sept-Feb	Low ≧ High	$p > .50$
	Sept-May	High > Low	$p < .05$
Low and High 8	Sept-Feb	High > Low	$.25 > p > .10$
	Sept-May	High > Low	$p \geqq .25$
Low and High 9	Sept-Feb	Low > High	$p > .25$
	Sept-May	Low > High	$p > .25$
10	Sept-Feb	High > Low	$.25 > p > .10$
	Sept-May	Low ≧ High	$p \geqq .25$
11	Sept-May	High > Low	$.25 > p > .10$
12	Sept-May	High ≧ Low	$p > .75$

---

* Detailed tables on each grade level are provided in Appendix D.

† All probabilities from chi square values calculated from 2 x 3 or 2 x 2 contingency tables (i.e., dichotomized gain scores versus the participation variable).

	September Testing	February Testing	May Testing
Participants	3,214	1,495	1,388
Nonparticipants	7,447	3,940	3,451
Total	10,661	5,435	4,839

Correlated gain scores for both half-year and whole-year periods were computed for approximately half of these pupils. The tabulation below shows the number of September-February and September-May scores used in analyses of median gains.

	September-February	September-May
Participants	982	1,163
Nonparticipants	2,015	1,447
Total	2,997	2,610

Table 27 shows how these median gains compare with mean gains and to a derived "gain index."*

There are two principal reasons for comparing different measures of gain as shown in Table 27: (1) the comparison helps illustrate how interpretations of program effectiveness may vary depending on which statistics are selected for emphasis and (2) consideration of the differences between means and medians provides informative clues regarding the shape of both the score distributions and the gain curves.

Perhaps the first thing apparent from Table 27 is that examination of either the means or the medians would lead to the same general conclusion about the program--over all grade levels, participating pupils did not gain as much as did their nonparticipating classmates. In virtually

---

* The total array of means and standard deviations by half-grades, testing periods, and program elements is available for reference from project files at Stanford Research Institute.

Table 27

COMPARISON OF MEASURES OF GAINS BY PARTICIPANTS AND NONPARTICIPANTS IN GRADES 4 THROUGH 10

1966-67

Grade Levels	Participation	Months Gained September-February Mean	Months Gained September-February Median	Months Gain September-May Mean	Months Gain September-May Median	Adjusted Gain Index[*]
4-6	Yes[†]	+3.3	+4.0	+4.8	+5.2	3.20
	No	+4.0	+5 4	+6 9	+6.8	3.21
7-9	Yes[†]	-2.2	+2 6	+8.3	+5.3	3.71
	No	+0.3	+5.4	+16.7	+8.0	3.74
10	Yes[†]	+2.2	+3.0	+6.2	+6.6	4.20
	No	+3.7	+9.7	+3.4	+3.8	4.14
4-10	Yes[†]	+1.2	+3.6	+8.5	+5.3	3.50
	No	+5.4	+5.5	+13.7	+6.9	3.46

---

[*] Adjusted gain index = $\frac{\text{Grade Level}}{\text{Initial Score}}$ (Retest - Test) +2.

[†] Includes all types and degrees of participation in the Compensatory Education Program at each grade level.

every instance, however, the differences between means are greater than the differences between medians. In addition, the whole-year mean gain of 8.5 months by all participating pupils in grades 4 through 10 suggests a more favorable evaluation of the program than does the median gain of 5.3 months.

A mean score (the familiar arithmetic average) and a median score (the midpoint score above and below which of half the cases fall) will coincide only if the distribution of scores from which they were computed is perfectly symmetrical. The mean is more influenced by extreme scores in the distribution than is the median. If the mean and median of a distribution differ, the direction in which the distribution is skewed is given by the sign (+ or -) of the difference between the mean and median. Thus, if the mean is less than the median, the distribution is skewed toward the low end of the distribution. ("Skewness" is conventionally defined according to the direction in which the tail of the distribution points.) The magnitude of the difference between the mean and median of a distribution is one term in a formula for calculating an index of skewness. Obviously, the greater the difference, the greater the skew.

Figure 2 shows (1) a symmetrical normal distribution, (2) a positively skewed distribution, and (3) a negatively skewed distribution. The location of the mean relative to the median is plotted in each to illustrate the preceding explanation.

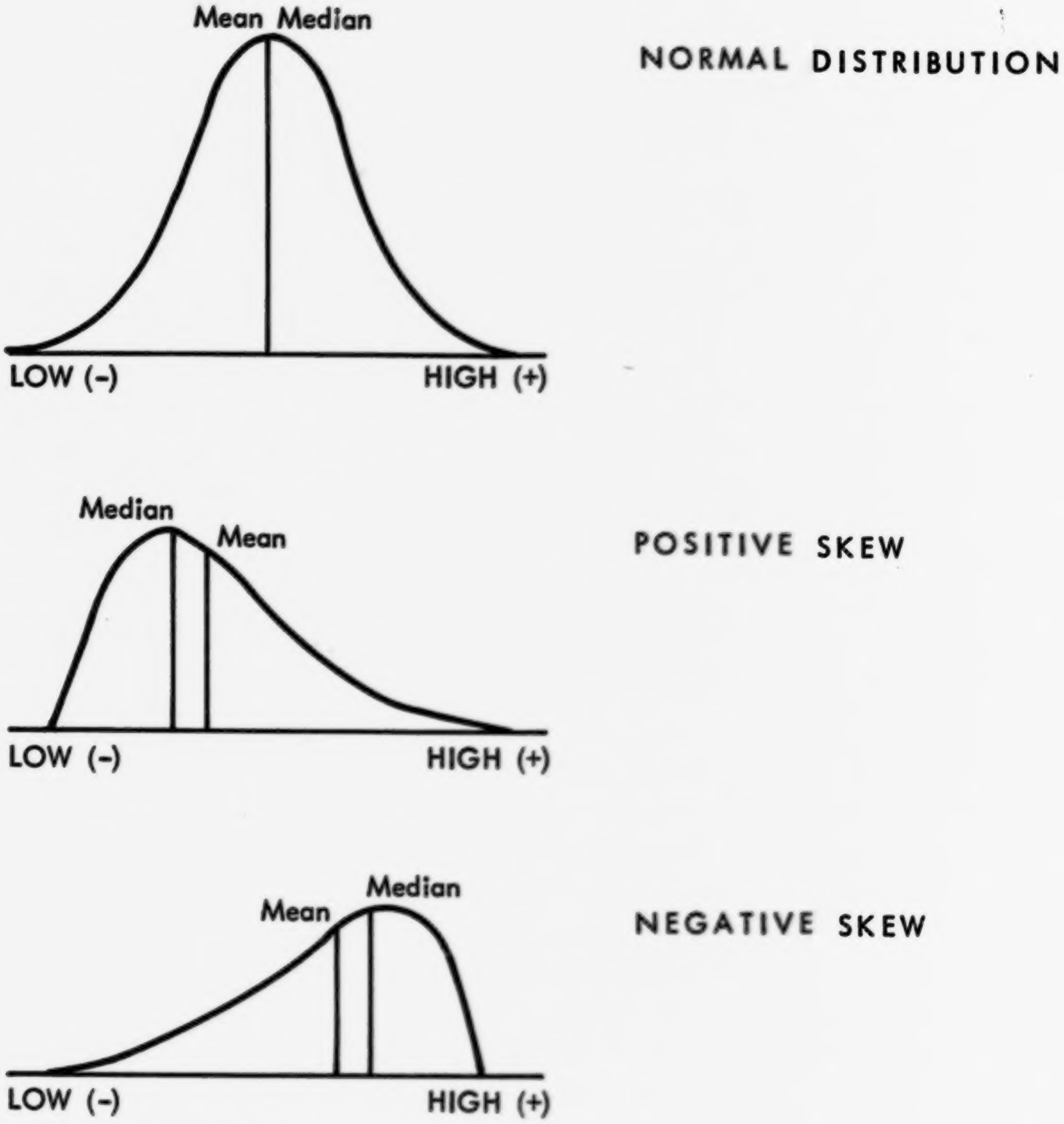
With the above background, consider the differences between median and mean gains over the September-May period shown in Table 27. For Grades 4 through 6 combined, scores for nonparticipating pupils appear to be distributed quite symmetrically since the mean and median are virtually identical. For participating Grade 4 to 6 pupils, however, some negative skewness is apparent since the median is greater than the mean.

The statistics for Grades 7 through 9 indicate radically greater departures from normality than do the distributions at Grades 4 through 6. The score distributions for both participating and nonparticipating pupils are positively skewed since the means exceed the medians in both instances. Moreover, the degree of skewness for nonparticipating pupils is much greater than even the considerable skewness apparent in the distribution of gain scores of participating pupils.

Score distributions at Grade 10 are similar in shape to that of participating pupils at Grades 4 to 6--both are somewhat negatively skewed but not radically so.

FIGURE 2

ILLUSTRATIVE DISTRIBUTIONS OF SCORES


Mean Median
NORMAL DISTRIBUTION
LOW (-)
HIGH (+)
Median
Mean
POSITIVE SKEW
LOW (-)
HIGH (+)
Median
Mean
NEGATIVE SKEW
LOW (-)
HIGH (+)

When gain scores are combined for Grades 4 through 10, deviations from normality similar to those displayed at Grades 7 through 9 are apparent. A few pupils gained a great deal, thus elevating the mean considerably above the median for both groups and for the nonparticipating pupils in particular.

Consideration of the September-February gains in contrast to the September-May gains suggests the general shape of the gain curves and also offers clues regarding differential rate of gain within the groups.

1. Considering only median gains over the first half-year compared with those for the whole year, it appears that the greatest fraction of total gain is realized during the first half of the year. Evidence suggesting that this conclusion is not warranted is presented in a subsequent sub-section, but it should be stated now that the larger first-half gains appear to be due mostly to first-of-year scores that reflect losses in reading achievement over the summer recess.

2. When mean gains are compared to median gains during the first half-year, some idea of the possible dynamics of gain can be obtained. In every instance, median gains exceed mean gains during the September-February period. This indicates negative skewness in the first-half distributions of gain scores. For nonparticipating pupils in particular, this situation is reversed by the end of the year. By the end of the year, slower pupils have come closer to the modal gain while faster pupils have accelerated well beyond the majority.

The righthand column in Table 27 presents derived indices of gain that suggest a somewhat different picture than the median or mean gains. These indices were derived by transforming the gain scores of 4,657 nonparticipating pupils and 2,191 participating pupils for whom test-retest scores were available. (In some instances, these were September-February pairs while in others they were September-May pairs. The proportions of half-year and whole-year pairs were similar for both participants and nonparticipants, thus justifying this pooling). Score transformations were performed to help show gain relative to the base from which the gain was achieved. Both the mean and median gains indicate that the participating pupils tended to be somewhat less able in reading than did their nonparticipating classmates. This fact was the primary reason why they were selected for participation. They were "behind" to begin with and they are still "behind"--but have they gained more than might have been expected had they not participated in special programs? The adjusted gain indices are an attempt to answer that question.

The adjusted gain indices were obtained by applying the following transformation formula to each pair of test-retest scores:

$$\frac{\text{Grade Level}}{\text{Initial Score}} \text{ (Retest-Test) } + 2$$

The constant, "2", was added to eliminate negative numbers that would prevail if a retest score were less than the initial test score.

The adjusted gain indices cannot be interpreted as a gain in months of grade equivalence. Rather, the indices simply permit comparisons of relative gain across grade levels and between participants and nonparticipants.

To illustrate the application of the formula, consider a low 6 pupil whose September grade equivalent score was 3.0 and whose May grade equivalent score w[illegible] 3.5. His adjusted gain index would be 3.0 computed as follows:

$$\frac{6.0}{3.0} (3.5 - 3.0) + 2 = 3.0$$

Similarly, a low 6 pupil whose September score was 4.0 and whose May score was 4.6 would have a gain index of 2.9:

$$\frac{6.0}{4.0} (4.6 - 4.0) + 2 = 2.9$$

The second pupil had a greater absolute gain than did the first (i.e., 6 months compared with 5 months). His gain index, however, is less.

The adjusted gain indices in Table 27 suggest that the participating pupils are gaining at a pace comparable to that of nonparticipating pupils. This is a favorable indication of the efficacy of the Compensatory Education Program, since it suggests a rate of gain for participating pupils that is accelerated beyond what would have been expected in the absence of special attention provided by the Compensatory Education Program.

The adjusted gain indices discussed above are closely related to more conventional rate measures. A further way of looking at the gains of participating and nonparticipating pupils, therefore, is by rate of change over the September-May period. Monthly rates for participating and nonparticipating pupils at various grade levels and combinations are shown in Table 28.

The rates of gain shown in Table 28 provide one additional indicator of program effects. The differences in the rate between participants and nonparticipants are small, although, in general, they tend to favor nonparticipants. The picture is far from one-sided, however, since at four of the nine separate grade level comparisons, participant rates are greater than those for nonparticipants. These rate figures also provide a basis for specific hypotheses regarding gains in the forthcoming year. Although reported in Table 28 as rates applicable to groups of pupils, rate computations can be made for individual pupils as well. Over the long term, changes in rate of gain by individual pupils may prove to be a more sensitive criterion against which to assess program effects than will amount of absolute gain.

Inferences Regarding May to September Losses in Reading Achievement

Earlier tables and discussion have pointed out that gains during the first half of the year tended to be greater than gains during the second half of the year. The one exception to this generalization is mean differences in Grades 7 to 9 combined, although for that grade combination, median gains did show half the total gain occurring during the first half of the year.

The most plausible explanation of this apparent anomaly is that many pupils experience a loss in reading ability during the summer recess. If this is so, high gains during the first half of the year do not mean that the first half-year is the "best time to learn"--it may simply mean that the base level from which gains are measured is lower than it "should" be. The idea that pupils experience a decline in reading ability during the May-to-September period seems particularly plausible for pupils who do not read well to begin with. These pupils, more than the better readers, are probably least likely to read voluntarily outside school.

The student data bank is not organized at the present time in a way that will permit an easy test of this May-to-September decline. An indirect test is possible with the 1966-67 data, however, by comparing May

Table 28

GAIN RATES BASED ON GROUP MEANS FOR PARTICIPATING AND NONPARTICIPATING PUPILS FROM GRADES 4 THROUGH 10 FOR THE PERIOD SEPTEMBER-MAY 1966-67

Grade Levels*	Participants	Nonparticipants
4-10 combined	1.0218	1.0282
4-6 combined	1.0165	1.0180
Low 4	1.0255	1.0308
High 4	1.0193	1.0203
Low 5	1.0164†	1.0114
High 5	1.0156	1.0261
Low 6	1.0085	1.0110
7-9 combined	1.0182	1.0281
Low 7	1.0195	1.0303
Low 8	1.0274†	1.0192
Low 9	1.0099†	0.9995
10 low and high	1.0121†	1.0065

---

* Grade level in September 1966.

† Rate of gain greater for participants than for nonparticipants.

scores at one grade level with September scores at the next higher grade level. If losses occur, one would expect the May scores for high 4 pupils, for example, to be somewhat higher than September scores for low 5 pupils.

The May and September group means and standard deviations are available for each grade level and the groups to be compared are virtually certain to be independent of one another (i.e., it is highly improbable that the same pupil would be classified as high 4 in May 1967 and as low 5 in September 1966). With these available data, May scores for grade N were compared with September scores for grade N+1 for both participating and nonparticipating pupils from grade 3 through grade 12. Nine differences were examined in each set, i.e., H3-L4, H4-L5, H5-L6, and so on. For nonparticipating pupils, seven of the nine differences were statistically significant at or below the .05 level and five of the nine differences showed the May means for grade N to exceed the September means for grade N+1. Over all grade pairs, the mean difference was 3.7 months decrement in reading achievement scores between May and September. From a statistical viewpoint, one cannot state with high confidence that a May to September decrement is experienced, but the evidence is persuasive.

For pupils who participated in the Compensatory Education Program, the results of tests of mean differences was even more inconclusive than for nonparticipating pupils, even though the mean difference over all grade pairs was 3.6 months favoring the May means. Nevertheless, in only five of the nine tests was a significance level reached that was at or below .05--three showed September means to be higher and two showed May means to be higher.

Although statistical support for the expectation that pupils will deteriorate in reading ability over the summer recess and hence show greater gains during the first half-year than during the second half-year is not sufficient to affirm the hypothesis, the evidence suggests a promising compensatory education tactic--a long term program of sustained low intensity extending over the entire year may be more effective than a long term program of high intensity for nine months that is followed by a three month period of zero intensity. Also, more direct tests should be undertaken with correlated scores of individual pupils.

Teacher Aides

Teacher aides are subprofessionals who serve in a variety of ways in both the public and parochial elementary schools in the target area and in the junior and senior high schools that serve students from the target area. The aides are both paid and volunteer and come from a variety of sources. For example, San Francisco City College has a program to train aides. (Members of SFUSD staff have participated in the planning of this program.) In general, every attempt is made to find aides from within the area from which the school's students are drawn and it is policy that at least one aide be from the local community on ESEA funded projects. Table 29 gives data on the use of aides in compensatory schools:

Table 29

USE OF AIDES IN THE COMPENSATORY EDUCATION PROGRAM

	SFUSD Elementary Schools	Nonpublic Elementary Schools	Junior High Schools	Senior High Schools
Number of schools with aides	28	10	12	5
Total number of paid aides	82	14	57	13
Avg. hours/week/paid aide	11.2	14.6	8.5	14.0
Total number of volunteer aides	80	5	9	6
Avg. hours/week/volunteer aide	2.4	8.2	3.2	2.0
Percentage of aide time spent helping:				
Teachers in classrooms	38%	39%	37%	16%
Individual students	28%	16%	32%	35%
Outside classroom (mimeo, filing, etc.)	34%	45%	30%	49%
Number of students to whom individual help was given*	293	38	115	n.a.

---

* This number is an understatement since one or two schools in each group did not or could not provide this information. On the average, a child is given individual help two or more times a week for varying periods of time.

Teacher Questionnaire Data. The responses in the teacher questionnaires indicate that, in elementary school, the percentages of teachers receiving aide help are as tabulated below.

Type Aide	Percent of Teachers, by Number of Aides				
	None	1	2	3	4
Paid aides	57.3%	27.2%	14.3%	0.7%	0.5%
Volunteer aides	88.6	10.0	1.2	0.0	0.2

Question 20 of the questionnaire asked: "If you have had teacher aides, how has this added service benefited your teaching situation?" A number of teachers reporting no aide service answered this question and were less positive than teachers who had aides. Therefore, cross tabulations of the response on question 20 and the number of aides and volunteers were made, and these are shown in Table 30 for teachers who had aides.

The teacher responses show enthusiasm for the teacher aides even though there are several factors that would tend to dampen a teacher's enthusiasm. Among them are:

1. The teacher often must spend time training an aide who may have minimum initial skills and be unfamiliar with the classroom routine.

2. The pay for aides is low. Therefore, when aides from the local neighborhood have been trained to perform effectively, they can often obtain higher paying positions. Some naturally avail themselves of this opportunity thereby causing problems associated with turnover. Also, some aides from the community leave their jobs to continue their education. While this can be considered a positive side effect, it adds to the turnover rate.

3. A preliminary calculation based on the number of total aide hours, teachers who reported they had aides, and the percentage response to questionnaires shows that the average teacher receives only two to three hours of service per week from an aide. (The cost to give a teacher this service is less than $5 per week).

Table 30

TEACHERS' RESPONSES TO QUESTIONS REGARDING THE BENEFIT OF AIDES

Number of Paid Aides	A Great Deal		Some		Not at All		Don't Know		No Answer	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1	38	34%	59	53%	3	3%	1	1%	11	10%
2	21	36	26	44	4	7	1	1	7	12
3	2	67	0	--	0	--	0	--	1	33
4	2	100	0	--						
Number of Volunteer Aides										
1	11	27%	16	40%	0	--	1	2%	13	32%
2	5	100	0	--	0	--	0	--	0	--
3	0	--	0	--	0	--	0	--	0	--
4	1	100	0	--	0	--	0	--	0	--

Under these circumstances, the responses of the teachers must be judged to be quite enthusiastic. The general indication from Table 30 is that the more service available, the higher the level of enthusiasm. On the basis of this enthusiasm and the low cost of these compensatory services, aides are judged to be highly cost effective in providing assistance to classroom teachers.

The junior and senior high school questionnaires provide roughly comparable results. At both levels, the questionnaires are divided into three groups: (1) teachers who have one or more compensatory classes, (2) regular teachers, and (3) administrators and counselors. For each group, distribution of aides to teacher is given first, followed by the rating of the aides. (No cross tabulation of number of aides by rating was made with the result that, in some cases, more teachers have rated aides than had aides to rate.) Table 31 shows the distribution and ratings of aides by junior and senior high school students.

The data in Table 31 support the earlier conclusion that compensatory teachers and other school staff working closely with the program tend to value the service received from aides. As has been shown, the picture in junior and senior high schools is similar to that found in the elementary schools. The allocation of time for aide service is the same for all elementary and secondary schools, even though student population may be as low as 125 in an elementary school and as high as 3,000 in a senior high school.

Principal's "Market Basket." In the principal's "market basket" problem, the current allocation was taken to be 40 hours per week of paid aide time per school. This was based on budget figures; later review of expenditures showed the figure to be between 32 and 33 hours per week. Therefore, the analysis based on the 40-hour budget understates any increase in expenditures on aides or overstates any decrease chosen by the principals. With this qualification, the "market basket" comparison for elementary schools is shown on page 90.

In designing their class size distribution for the current budget, about half the principals made specific mention of employing aides to support classroom teachers. Typically, this was part of a plan in which class size reductions were made in the first and second grades at the expense of the fifth and sixth grades and the aides were designated to assist the fifth and sixth grade teachers.

Table 31

RATINGS OF TEACHERS' AIDES BY JUNIOR AND SENIOR HIGH SCHOOL TEACHERS AND OTHER STAFF

No. of Aides	Percentage of Total Teachers and Staff Receiving Assistance from	
	Paid Aides	Volunteer Aides
None	61.1%	97.2%
1	22.2	2.8
2	13.9	--
3	--	--
4	2.8	--

Percentage of Total Teachers and Staff Rating Benefit of Service	
A great deal	33.3%
Some	16.7
Not at all	36.1
Don't know	8.7
No answer	5.6

No. of Aides	Percentage of Junior High Regular Teachers Receiving Assistance from	
	Paid Aides	Volunteer Aides
None	87.1%	96.5%
1	10.5	1.9
2	1.9	0.5
3	0.3	0.5
4	--	0.3

Percentage of Junior High Regular Teachers Rating Benefit of Service	
A great deal	10.2%
Some	10.8
Not at all	42.7
Don't know	19.4
No answer	16.9

Table 31 (continued)

No. of Aides	Percentage of Junior High Administrators and Counselors Receiving Assistance from Paid Aides	Percentage of Junior High Administrators and Counselors Receiving Assistance from Volunteer Aides
None	90.2%	97.6%
1	2.4	2.4
2	4.9	--
3	--	--
4	2.4	--

Percentage of Junior High Administrators and Counselors Rating Benefit of Service	
A great deal	31.7%
Some	17.1
Not at all	9.8
Don't know	7.3
No answer	31.7

No. of Aides	Percentage of Senior High Compensatory Teachers Receiving Assistance from Paid Aides	Percentage of Senior High Compensatory Teachers Receiving Assistance from Volunteer Aides
None	67.9%	85.7%
1	14.3	10.7
2	10.7	3.6
3	3.6	--
4	3.6	--

Percentage of Senior High Compensatory Teachers Rating Benefit of Service	
A great deal	32.1%
Some	3.6
Not at all	39.3
Don't know	17.9
No answer	7.1

Table 31 (concluded)

No. of Aides	Percentage of Senior High Regular Teachers Receiving Assistance from Paid Aides	Percentage of Senior High Regular Teachers Receiving Assistance from Volunteer Aides
None	91.6%	95.8%
1	5.4	1.8
2	2.4	0.6
3	—	0.6
4	0.6	1.2

Percentage of Senior High Teachers Rating Benefit of Service	
A great deal	7.2%
Some	7.2
Not at all	50.9
Don't know	24.0
No answer	10.7

No. of Aides	Percentage of Senior High Administrators and Counselors Receiving Assistance from Paid Aides	Percentage of Senior High Administrators and Counselors Receiving Assistance from Volunteer Aides
None	60.0%	86.7%
1	—	6.7
2	13.3	6.7
3	13.3	—
4	13.3	—

Percentage of Senior High Administrators and Counselors Rating Benefit of Service	
A great deal	20.0%
Some	26.7
Not at all	13.3
Don't know	26.7
No answer	13.3

	Present Total Budget	25 Percent Decrease in Budget	25 Percent Increase in Budget
Percent change in total expenditures from current budget	+3%	-30%	+37%
Amount of paid aide time per week, by number of schools			
No aides	2	5	3
Up to 30/hr/wk	5	8	5
30 to 60/hr/wk	11	7	7
Over 60/hr/wk	5	3	8

This tabulation shows variability in individual principal's perceptions of their needs. It is likely that those principals who would reduce expenditures on aides are mainly those who have faced training and turnover problems. Past a given point, they feel that aides "aren't worth the effort." Presumably, if the principals could be assisted by resource personnel in screening and training applicants from the local neighborhoods, the services of aides would be considered desirable by all elementary school principals.

Materials, Equipment, and Supplies

A wide variety of instructional materials, equipment, and supplies is available throughout the District. While many of these items have long been part of the conventional stock of aids to instruction, the introduction of certain items was made possible for the first time by ESEA funds. In other instances, ESEA funds permitted substantial increases in the supply and variety of familiar materials and equipment.

Elementary Teacher Questionnaires. Evaluations of the usefulness of these material and equipment items were obtained from elementary teachers with the questionnaire previously described. The tabulation below indicates how all elementary teachers ranked the 17 items.* Table 32, which follows, shows the grade level at which the highest single rating was received for each item. Table 33 shows the items ranked highest and lowest by teachers of each elementary grade.

1. Library books
2. Filmstrips
3. Filmstrip projector
4. Records
5. Films
6. Tape recorder
7. Study prints
8. 16 mm projector
9. Listening center
10. Tapes
11. Heat copier
12. Individual previewers
13. Overhead projector
14. Primary typewriter
15. Cameras
16. Multiple copies of trade book
17. Realia (exhibits and art objects)

Secondary Teacher Questionnaires. Junior and senior high school teachers completed a somewhat different questionnaire than that presented to elementary teachers. Table 34 shows the ranking of material and equipment items developed from ratings provided by secondary level teachers. The rank-order correlation between these two rankings is .68--large enough to be considered other than chance ($p < .01$). Although junior and senior high school teachers were in moderately close agreement regarding the usefulness of these items, they differed considerably in their rankings of some items, as Table 34 shows.

---

* The composite ranking of each item was calculated by weighting the response categories, multiplying the rating frequencies by the weights, and summing overall response categories by item. Response category weights were as follows: (1) "a great deal" = 4, (2) "some" = 3, (3) "not at all" = 2, (4) "I don't know" = 1, and (5) "no answer" = 0. Rankings obtained in this manner differ slightly from ones obtained by calculating the median rating since the latter treat the "I don't know" and "no answer" responses as unfavorable ratings.

Table 32

GRADE IN WHICH EACH ITEM OF EQUIPMENT RECEIVED HIGHEST RATING IN "A GREAT DEAL" CATEGORY

Item	Grade Level of Teachers' Rating the Item Highest	Percentages of "A Great Deal"
Library books	2nd grade	70.6
Filmstrips	1st grade	79.6
Filmstrip projector	5th grade	76.7
Records	1st grade	57.1
Films	3rd grade	63.3
Tape recorder	2nd grade	47.1
Study prints	2nd grade	48.5
16mm projector	6th grade	56.5
Listening center	2nd grade	42.6
Tapes	2nd grade	33.8
Heat copier	2nd grade	57.4
Overhead projector	4th grade	30.0
Primary typewriter	1st grade	26.5
Multiple copies of trade books	1st grade	29.6
Realia (exhibits and art objects)	5th grade	16.3

Table 33

MATERIAL AND EQUIPMENT ITEMS RANKED HIGHEST AND LOWEST BY ELEMENTARY TEACHERS WITHIN EACH GRADE LEVEL

Grade Level	Highest Ranked Items	Percent Assigning Highest Rank	Lowest Ranked Items	Percent Assigning Lowest Rank
Kindergarten	Library books	63.6	Listening center	18.2
	Records	52.3	Tape recorder	18.2
	Filmstrip projector	52.3	Tape	13.6
			Multiple copies of trade books	11.4
			Realia	6.8
			Primary typewriter	6.8
			Overhead projector	4.5
1st Grade	Filmstrips	79.6	Realia	8.2
	Filmstrip projector	75.5	Overhead projector	8.2
	Library books	69.4		
	Records	57.1		
	Heat copier	50.0		
2nd Grade	Filmstrip projector	73.5	Multiple copies of trade books	19.1
	Library books	70.6	Primary typewriter	19.1
	Filmstrips	66.2	Overhead projector	11.8
	Heat copier	57.4	Realia	2.9
	Films	55.9		
3rd Grade	Library books	65.0	Overhead projector	16.7
	Films	63.3	Realia	10.0
	Filmstrips	60.0	Multiple copies of trade books	8.3
	Records	53.3		
	16mm projector	51.7		
4th Grade	Filmstrips	68.0	Realia	16.0
	Filmstrip projector	66.0	Primary typewriter	12.0
	Library books	64.0	Multiple copies of trade books	6.0
	Films	54.0		

Table 33 (concluded)

Grade Level	Highest Ranked Items	Percent Assigning Highest Rank	Lowest Ranked Items	Percent Assigning Lowest Rank
5th Grade	Filmstrip projector	76.7	Multiple copies of trade books	16.3
	Filmstrips	67.4	Realia	16.3
	Library books	65.1	Overhead projector	11.6
	Films	62.8	Primary typewriter	4.7
	Heat copier	55.8		
	16mm projector	51.2		
6th Grade	Library books	63.0	Studyprints	21.7
	Films	58.7	Overhead projector	21.7
	16mm projector	56.5	Multiple copies of trade books	10.9
			Realia	8.7
			Primary typewriter	6.5

Table 34

RANKING OF MATERIALS AND EQUIPMENT ACCORDING TO RELATIVE USEFULNESS BY JUNIOR AND SENIOR HIGH SCHOOL TEACHERS IN THE COMPENSATORY EDUCATION PROGRAM

Materials and Equipment	Junior High School Teachers' Ranking	Senior High School Teachers' Ranking
Machine for making ditto masters and transparencies	1	5
Motion picture projector	2	6.5
Film strip projector	3	2
Tape recorder	4	1
Overhead projector	5	4
Phonograph	6	3
Flash cards and instructional games	7	10
Screens	8	8
Controlled reader	9	14
Portable tape recorder	10	11
Special reading film strip series	11	15
Listening center	12	9
Camera	13	13
Individual film strip previewer	14	12
Multimedia library	n.a.	6.5

---

n.a. = not applicable.

Elementary School Principal's "Market Basket". The elementary principal's "market basket" was not set up to evaluate materials and equipment specifically. However, the principals were allowed to write in any other services they felt would contribute to their school's program. Under the current budget, 6 of the 23 target area schools chose to allocate some resources for materials and equipment. The amounts were 0.16, 0.28, 0.33, 0.39, 0.55, and 0.55 classroom teacher equivalent units. Thus, in the case of the two largest expenditures of 0.55, those schools purchased additional material and equipment equivalent to another half-time librarian or community teacher or 110 hours per week of paid aide help. In at least some schools, therefore, the perceived need for additional instructional materials appears to be acute.

Receiving School Environment

Upper elementary pupils from the four saturation service schools are being bused to receiving schools outside the target area. This creates additional classroom space in the saturation service schools, thus permitting class size reductions for pupils in Grades 1 to 3 as previously described. It also exposes target area pupils to different school environments and makes possible some assessment of the apparent effects of this exposure.

Students' Data Bank. Information regarding bused pupils from grades high 4, 5, and 6 from two of the four saturation service schools has been entered in the student data bank. Also entered in the data bank is information about pupils at these same grade levels in the four schools receiving the bused pupils. It is possible, therefore, to compare half-year and whole-year gains in reading achievement for bused pupils, receiving school pupils, and other pupils at the same grades who remain in their original target area schools. Table 35 presents comparative gains for these pupils over the September-February and September-May periods.

Chi squares were calculated to test the significance of differences among the distributions reflected in Table 35. Over both the half-year and whole-year periods, bused pupils in grades high 4, 5, and 6 combined did not differ from pupils at the same grade levels who remained in their home schools in the target area ($p > .75$ for September-February and $p > .95$ for September-May). Gains made by bused pupils and by receiving school pupils were compared for the September-May period. The difference, favoring the receiving school pupils, was significant at the .05 level. Comparisons of bused to receiving school pupils were made at each of the grade levels over the whole-year period. Because the small number of

Table 35

GAINS IN READING ACHIEVEMENT TEST SCORES BY PUPILS FROM GRADES HIGH 4 THROUGH HIGH 6 WHO ARE BUSED TO SCHOOLS OUTSIDE THE TARGET AREA AND BY PUPILS OF SIMILAR GRADE LEVELS IN RECEIVING SCHOOLS AND TARGET AREA SCHOOLS

Period of Observation	Students' Home School	75% Gained This Many Months or More	50% Gained This Many Months or More	25% Gained This Many Months or More
September-February	Saturation service school (N = 66)	-1.5	3.6	8.0
	Receiving school (N = 182)	-0.4	4.5	8.9
	Other target area schools (N = 554)	-1.1	4.0	8.5
September-May	Saturation service school (N = 72)	0.8	5.2	9.7
	Receiving school (N = 244)	3.6	8.8	13.6
	Other target area schools (N = 378)	0.4	5.2	10.0

bused pupils on whom data were available at grades high 4 and 5, it was necessary to divide the gain variable. At grade high 4, the exact probability of bused versus receiving school pupil comparison was .104. At grade 5 (low and high combined), the probability value by chi square fell between .20 and .10. At grade 6 (low and high combined), the difference between bused and receiving school pupils was clearly significant ($p < .005$). When these same grade 6 bused pupils were compared with their counterparts who remained in target area schools, the difference was not significant ($p > .50$).

Observation over a longer period will be necessary before the full effects of busing on reading achievement can be assessed. On the basis of information available at the present time, however, it does not appear that the changed school environment has resulted in gains that differ from those experienced by pupils who remain in their home schools within the target area.

After School Study Centers

After school study centers were used in all four of the elementary saturation schools and five of the 24 elementary target area schools. These centers were directed by teachers and most had paid aides drawn principally from the Neighborhood Youth Corps. Students were given individual help with their homework or in their areas of weakness.

Within these general guidelines, the plan of instruction in the center, the number of aides, and the number of students varied from school to school. In each saturation school and one target area school, sessions lasted two hours; the other four target area schools had one-hour sessions.

Reports of Study Center Directors. Responses from the study center directors reveal the following general trends:

1. In all study centers, a number of students who were looking for help and who were motivated to consistent attendance recorded considerable improvement. For example, one center that was (a) staffed by a single teacher, (b) had one hour per week of aide help, (c) ran four one-hour sessions a week, (d) had 15 students of which 9 attended regularly, and (e) specialized in teaching arithmetic skills, reported the following: "Some of the children amazed me at their progress. One girl who was in the High 3 on trial really learned her combinations and was not only brought up to grade level but did better than most of her class

in arithmetic. Another girl who participated in the program for the whole year (Low 4-High 4) became very proficient in her understanding and working with the basic addition, subtraction, multiplication, and division concepts. Her progress amazed both her teacher and myself. She learned her basic facts so well she constantly won all the games.

"A boy who came from one of the southern states was not up to his class when he entered School X. He came to understand the basic concepts needed for his grade and was shortly brought up to grade level.

"I feel most of the children profited greatly by this tutorial experience. When they understood the reason behind what they were doing they wanted to do more and to do better. Most of their classroom work improved greatly. Most of them were brought up to grade level or beyond. They became successful in their classroom work and thus happier and better behaved."

2. Those centers that relied on the student to bring assignments from his classroom teacher, had difficulty assuring that the student had enough work to do--particularly in a two-hour session. This problem is particularly acute in the saturation study centers where the students in grades high 4, 5, and 6 were bused in from the receiving schools making coordination with the classroom teacher very difficult. In some centers, part of the time was filled with instructional games, films, or other audiovisual techniques arranged by study center personnel. The rate of attendance tended to be better in centers following the latter course.

3. The aides provided through the Neighborhood Youth Corps were viewed as a mixed blessing by the study center directors. Many aides, particularly in the autumn, were reported as showing little interest or initiative in helping the children and to be irregular in attendance. Other aides were very conscientious and assisted the teachers considerably. Several bilingual (Spanish-English) aides were very helpful with students of Spanish background. Furthermore, the better teenage aides were able to establish good rapport with the students. However, even the better aides had difficulties assisting the teachers with students above the Grade 4 level. Their capabilities in mathematics (particularly "new math") and spelling almost universally were too restricted for effective help at Grades 5 and 6.

The study center teachers definitely want aides so that individual attention can be given the students. However, they would like better screening of the aides and some provision for individual teachers to determine who works in the center. Some provision for at least minimal pretraining also is considered to be needed.

In summary, the responses from study center directors indicated that each teacher had successes with some children and felt that this type of service was needed. (Our case studies on students in the target areas--as well as the general literature--indicates that in general, target area students have poor conditions at home for doing homework and studying and receive little academic help from their parents. Therefore, the study centers can theoretically provide an important service to these students). However, to varying degrees, problems of encouraging student attendance, coordinating with classroom work, and obtaining satisfactory assistance from aides so that instruction can be individualized exist in all the centers.

Elementary Teacher Questionnaire. Three questions were asked in the elementary teacher questionnaire about after school study centers (questions 26, 27, 28). The first question was: "How many of your children regularly attend the after school study center?" Teachers responded as tabulated below.

Number of Students Reported Attending	Teacher Responses	
	Number	Percent
0	298	72.3%
1	23	5.6
2	17	4.1
3	17	4.1
4	13	3.2
5	10	2.4
6	6	1.5
7	0	0
8 or more	5	1.2

This indicates that 276 or more students are in regular attendance at after school study centers. However, this number is more consistent with the total number of students found on the study center lists than with the number of students who actually attended a majority of the sessions. Therefore, in evaluating the results shown in the remaining tables and tabulations, one should bear in mind that many of the students probably attended fewer sessions than the classroom teacher believed.

For the 86 teachers who reported one or more students in attendance, the following ratings on question 27 were obtained.

A Great Deal	Some	Not at All	I Don't Know	No Answer	"If one or more of the children from your class have regularly attended the after school study center, have you noticed any changes in the following?"
0.0%	20.9%	50.0%	13.9%	15.1%	Their attendance has improved
5.8	53.5	30.2	8.1	2.3	They seem more interested in school
4.7	47.7	36.0	8.1	3.5	They are more attentive in class
4.7	50.0	32.5	9.3	3.5	They are more responsive during class
3.5	27.9	52.3	11.6	4.7	They are better behaved in the classroom
4.7	45.3	30.2	15.1	4.7	They seem to be enjoying school more than before
8.1	58.1	23.3	10.5	0.0	They seem to be doing better academic work than before
8.1	33.7	36.0	17.4	4.7	They seem more relaxed and happy
13.9	48.8	24.4	10.5	2.3	They are more likely to seek help from me

A total rating for the nine items was made, which ranged from 9 (for all "a great deal") to 36 (for all "I don't know" or "no answer"). Only 24 percent of those responding rated the items at 18 or above which corresponds to an average of "some." Compared with other services in the Compensatory Education Program, this is one of the lowest ratings.

Question 28 asked: "Are you sure that the after school study center was the major cause of the characteristics that improved?" About one-fourth--28 percent--answered "yes," 60 percent answered "no," and 12 percent did not reply to this question.

In sum, it appears that the after school study center is considered by teachers as a facility with relatively low effectiveness. This overall evaluation holds even for teachers who send pupils to the study centers.

Principal's "Market Basket". The principal's "market basket" provides little support for the after school study centers. In the 1966-67 budget, two of the four saturation schools and three of the five target area schools that had after school study centers would allocate funds to them. On the other hand, two other target schools purchased after school study centers. Interestingly, for both the 25 percent increase and the 25 percent decrease, allocations are further decreased from those allocations in with the 1966-67 budget.

Services to Nonpublic Schools

Within the target area there are 13 elementary schools of the Catholic Archdiocese of San Francisco. Cooperative arrangements have been established between the District and the Archdiocese of San Francisco so that students of these 13 nonpublic schools can receive certain Compensatory Education Program services. During the 1966-67 school year, it was not possible to give the full complement of services that were planned due to difficulties in personnel recruitment. The services that were given included diagnosis of reading disorders in the 1966 and 1967 summer reading clinics, field trips, teacher aides, and compensatory reading classes.

The compensatory reading classes are the only element of the program that will be evaluated specifically at this time for the nonpublic schools. Due to the recruitment difficulties mentioned, it was not until February 1967 that it was possible to supply seven compensatory teachers to eight of the thirteen nonpublic schools.

The nonpublic elementary schools give their own achievement tests in March of each year. However, to permit comparison with the effect of compensatory services in the public schools, it was decided to administer the Stanford Reading Test (Primary II) at Grade 4. This test had also been administered at that level in the public elementary schools in late September and mid-May. The results shown in Table 36 were obtained.

Table 36

CHANGES IN STANFORD READING TEST (PRIMARY II) GRADE EQUIVALENT SCORES FOR A SAMPLE OF NONPUBLIC SCHOOL PUPILS IN GRADE 4

September 1966 to May 1967

Participation in ESEA Program	Months Change Between Testing Periods					Total Number of Pupils	Median Gain
	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More		
No participation in ESEA program	8	62	143	83	44	340	6.9
Reading program	1	11	25	18	10	65	7.7
Other ESEA activities	1	4	3	1	1	10	3.0
Both reading and other ESEA activities	--	1	1	1	--	2	3.0
Total	10	78	172	102	55	417	6.9

Note: Differences between nonpublic school nonparticipants (N = 340 in the table) and nonpublic school participants in the reading program (N = 65) were not statistically significant; chi square = 0.772, $p > .75$ (df = 3).

The median gain by nonpublic school pupils participating in the reading program was somewhat greater than that experienced by their nonparticipating classmates. However, as the table footnote indicates, this difference was not statistically significant ($p > .75$).

The gains achieved by 65 nonpublic school fourth graders shown in Table 36 appear greater than those of a sample of 88 public school fourth graders reported in Appendix B . Any comparisons made between the two groups, however, should be between the nonpublic school group and only the 75 public school fourth graders who were reading most below grade level in September because these are the groups of pupils who were most similar in reading level at the beginning of the year. The difference between these groups approaches, but does not reach, an other than chance level of statistical significance ($p > .05$). Even this comparison is not wholly meaningful, however, for other differences between the two groups (language backgrounds, instructional procedures employed, etc.), are not known. The overall performances of 353 public school fourth graders and 417 nonpublic school fourth graders were essentially identical--a median gain of 6.4 months for public school pupils and a median gain of 6.9 months for nonpublic school pupils.

In-service Training

In-service training is provided in ESEA schools through Title I funding. It is an addition to normal SFUSD in-service training opportunities and focuses on the effective use of new materials and teaching techniques with the compensatory student. The program draws on the experiences of the compensatory teachers themselves and the expertise of district resource personnel and their consultants.

Elementary Schools

In the elementary schools, different services such as those of community teachers, librarians, and social workers each have in-service training as part of their normal operation. However, the formal in-service training described in Section 2-2 in the Compensatory Education Program plan is directed primarily toward aiding the compensatory teacher primarily, although services provided by the audiovisual and mathematics teachers were available to regular classroom teachers.

The program includes 64 compensatory teachers classified as follows:

Public schools	
State federally funded	47
Locally funded	10
Nonpublic schools	7

In-service training included the five types of meetings* listed below. (The number of sessions and approximate attendances are also shown.)

1. Resource persons from the community for extending curriculum areas: 30 sessions, 89 teachers.
2. Orientation for compensatory teachers new to the program: 2 sessions, 80 teachers.
3. Visitations to compensatory classes
   a. Group basis: 6 sessions, 50 teachers.
   b. Individual basis: These are arranged on short notice or when the need arises. Many are also arranged between the principal of the school requesting the visit and the principal of the school that the resource teacher has recommended be visited.
4. General meeting to share ideas in the employment of compensatory education throughout the school: 1 session, 64 compensatory teachers.
5. Use of books and materials: 3 sessions, 64 compensatory teachers.

During 1966-67, one compensatory resource teacher was designated as responsible for the in-service training of the compensatory teachers. As a result of the late date at which ESEA funding became available, selection of compensatory teachers had to be delayed and a number of the compensatory teachers were either new teachers or long term substitutes.

---

* Since the nonpublic school compensatory teacher program did not start operation until February 1967, a separate in-service program was run for these schools.

Therefore, the demand for in-service training--particularly on an individual basis--exceeded capability. With earlier funding for the 1967-68 school year, these problems should be reduced.

Principal's "Market Basket." Responses from the principal's "market basket" problem revealed that, at the present level, few principals consider the resource teacher of value. Only one school was interested in as little as 1/25th of a resource teacher--the 1966-67 allocation. Those schools that wanted a resource teacher wanted services expanded up to 3/10ths of a resource teacher. Thus, under the 1966-67 budget, the allocation to the resource teacher increased by 7 percent, but only 9 of the 23 schools were involved.

Teachers' Questionnaire. The classroom teacher's questionnaires were not specific to Title I-financed in-service education. Rather, the responses to the questionnaire present teachers' reactions to the ESEA services in combination with the District's regular program.

Question 16, on in-service training, asked: "Generally speaking, have demonstrations, visitations, meetings, and other in-service training programs been helpful to you this year?" Teachers answered as tabulated below.

Response	Percent
Very helpful	12.1%
Somewhat helpful	31.6
Not particularly helpful	14.1
Was not involved in any in-service training activity	38.4
No answer	3.8

A second question (number 17) asked: "How helpful has the following in-service training been to you?" Teachers replied as tabulated below.

Category	Percent Evaluating Helpfulness A Great Deal	Some	Not at All	Don't Know or No Answer
Demonstrations	14.1%	28.6%	13.8%	43.5%
Visitations	5.8	17.5	18.9	57.8
Small group meetings	5.8	20.1	17.0	57.1

In addition, 10.7 percent of the teachers mentioned other in-service activities that they participated in and 39.6 percent described in-service activities they would like to receive. These results are not inconsistent with the impression that approximately 40 percent of the teachers who desire in-service training are obtaining it and are generally satisfied with--although not necessarily enthusiastic about--its quality. Responses to the two questions reported above strongly suggest that both the availability and quality of in-service programs need improvement. Less than 50 percent of the teachers responded favorably to question 16 or to any part of question 17.

A similar impression follows from answers to questions 13, 14, and 15 on resource personnel. Less than 20 percent of the teachers responded favorably to any item. It appears that these responses are due primarily to the limited availability of the resource personnel and consequent infrequent contact between resource teacher and classroom teacher. Responses to questions 13, 14 and 15 are given in Appendix C.

For both the compensatory teacher and the regular classroom teacher, especially new ones, teaching in target area schools presents new and often unsettling difficulties and opportunities. From teachers' and principals' reactions, it appears that the current in-service training (both District and Title I-financed) for teachers in target and suburban schools should be carefully reviewed to assure that its focus, resources, and availability are appropriate to the circumstances. Increased use of teachers in planning, carrying out, and evaluating in-service activities would perhaps be helpful.

Secondary Schools

The compensatory program in junior and senior high schools is focused on compensatory classes with only minimum provision of other special services. The selection of teachers for compensatory classes is along subject divisions; it is not a full-time position in secondary schools as it is in the elementary schools. For example, a teacher might teach two compensatory and three regular English classes each day. Under these circumstances and considering that compensatory students are neither the most nor the least retarded students in a school, the normal in-service training supports both the compensatory and regular classroom teacher.

The compensatory in-service training program is used to aid teachers to exploit the special advantages of the compensatory classes fully; that is, the advantages of reduced class size, special material and equipment, new teaching methods, and the reduction of disciplinary problems. In-service training is the responsibility of one resource teacher at the junior high level and one at the senior high level who work in coordination with a compensatory representative selected in each school. The compensatory representatives are released from the teaching of one class to provide at least part of the time required for their special duties.

In the junior high schools, emphasis was placed on in-service meetings within the individual schools. At the senior high level, interschool meetings were more common.

The list below outlines in-service training program at the senior high school level.

1. General meetings: Meetings of compensatory representatives from each high school; 8 persons attended 6 meetings of 2 hours each. Meetings of all compensatory teachers; 25 persons attended 8 meetings of 2 hours each.

2. Intraschool visitations of compensatory classes: Visits by individual compensatory teachers; 12 teachers attended 3 meetings of 2 hours each.

3. Interschool visitation of compensatory classes: Visits by individual compensatory teachers; 10 teachers attended 1 meeting of two hours.

4. District-wide demonstration classes by compensatory teachers: Observations were set up in six different programs. The programs ranged from 1 to 5 hours in length and each was attended by 20 to 25 of the compensatory teachers.

5. Individual school compensatory staff meeting: Within each school, meetings were held for discussion, evaluation of program, curriculum work, and general business. Each compensatory teacher attended in his own school. A typical program entailed 4 meetings of 2 hours in length over the year.

6. Summer workshops: Summer workshops were conducted in 1966 and 1967. Each workshop was of 30 hours duration and involved 10 teachers in 1966 and 5 in 1967.

The only direct rating of in-service training and resource personnel is given in the teachers' questionnaire. Responses from compensatory teachers are shown below (other responses are in Appendix C). Due to the small sample size, the number of responses, rather than the percentage, is used.

	Teachers' Evaluations of Helpfulness			
Junior High School Services and Activities	A Great Deal	Some	Not at All	Don't Know or No Answer
In-service training and classroom visitations	6	12	10	8
Substitute time allowed for in-service training and meetings	11	7	10	8
District resource teacher	9	4	13	10
Community resource teacher	5	5	15	11
Audiovisual resource teacher	6	10	11	9

Senior High School Services and Activities	Teachers' Evaluations of Helpfulness			
	A Great Deal	Some	Not at All	Don't Know or No Answer
In-service training and classroom visitations	10	11	6	1
Substitute time allowed for in-service training and meetings	15	8	3	2
District resource teacher	9	5	5	9
Community resource teacher	4	1	8	15
Audiovisual resource teacher	3	6	8	11

The principal conclusion to be drawn from the above responses is that compensatory teachers rate the in-service program more highly at the senior high level than at the junior high level. The responses of junior and senior high school teachers to in-service training and substitute time are not strictly comparable. However, the fact that only half of the junior high school compensatory teachers provided a positive rating on in-service training, visitation, and substitute time suggests that the program needs review and possible revision. While no one program can expect to serve all the teachers' needs and interests, a 50 percent favorable response rate seems low.

All the resource personnel except the district resource teacher at the senior high level are rated positively by less than 50 percent of the compensatory teachers. While this also warrants further investigation, the resource personnel are limited, and they are there to aid those who need help. Consequently, the number of apparent successes (i.e., number of judgments of "a great deal" of help) seems to be a better measure of the value of resource personnel. A figure for an "expected" number of successes for each resource person will be greatly affected by circumstances peculiar to time and place. This should be kept in mind as the responses from teachers are examined.

Supporting and Auxiliary Services

Introduction

The subprogram for supporting and auxiliary services complements services available from the classroom teacher. The array of services included under this subprogram are directed toward:

- Speech development and correction
- Home-to-school contact and understanding
- Social worker service to students and parents
- Diagnosis and remediation of severe reading problems
- Aid to students unable to operate in the normal school environment
- Improvement of learning environment for neglected and delinquent children

These services will be described and discussed individually. Only programs that began late in the spring or during the summer of 1967 will be described at this time.

Speech Development and Correction Program

Before the initiation of the ESEA Title I Program, the SFUSD provided speech and hearing services to district schools on an itinerant basis. Through the use of Title I funds, it was possible to provide five additional specialists. Four of these specialists were to work full-time in each of four saturation services schools. The fifth specialist was assigned to coordinate speech and hearing services as they relate to all of the compensatory schools in the District. The following descriptive material is taken from the year-end report of the ESEA Coordinator.

The purposes of the speech project were to:

1. Provide speech and hearing services for the considerable number of communication-handicapped children who need more intensive, pervasive, and coordinated therapy than can be provided on a regular itinerant basis.

2. Contribute to the effectiveness of all school personnel in the identification of special learning problems which reflect dysfunction of discrete communicative processes.

3. Indicate some direction of services provided by speech and hearing specialists serving the remaining compensatory schools on an itinerant basis.

4. Contribute more significantly to a general school program attempting to improve oral communication which subserves reading and writing skills.

In addition to the primary objective of providing speech and hearing clinical services on a saturation basis in the four target schools, the relationships described below have been established. These relationships generally do not exist in the regular itinerant speech and hearing services provided by the District in nonsaturation schools.

Prekindergarten Service. Many prekindergarten children with severe communication disorders have been identified by the speech and hearing specialists in the saturation schools. Medical, social worker, and diagnostic referrals have been made; parent conferences have been initiated; and some prekindergarten children have received direct clinical services coordinated with prekindergarten teachers. Language development activities in the prekindergarten program contribute to the prevention of further problems in communication development. Only those prekindergarten centers housed in the four saturation schools receive this service. The remaining four prekindergarten centers have only the consultative services of the ESEA speech development and correction coordinating specialist.

Parent Conferences. Parent conferences initiated by the saturation speech and hearing specialists have been greatly intensified. Some parents are scheduled for conferences on a regular basis. A greater opportunity is provided for more effective parent contacts because of the increased flexibility of the specialists' scheduling. Itinerant speech and hearing specialists are not able to make contact with as many of the more evasive parents of students with significant communication problems as the saturation specialists are able to make.

The "Carry-Over" Work. Therapy activities have become more effectively coordinated with classroom work. The specialist, having greater opportunity to achieve rapport with the classroom teacher, has been able to activate the teacher's interest and involvement in the therapeutic process. Classroom teachers have become increasingly enthusiastic abo t the more effective interrelationship and consequent increase in the effectiveness of the speech and hearing services. The specialist is rea ily available at the teacher's request for observation, consultation, diag osis, and demonstration.

Staff Work. In three of the four saturation schools, the speech nd hearing specialists participate in weekly or biweekly staff meetings w th the social worker, administrator, teacher, community teacher, nurse, p ychologist, and often with the doctor.

Interagency Communications. With the increasing involvement of a ministrators, teachers, parents, and ancillary certificated school per onnel in speech and hearing services, more effective communication has c veloped between the speech and hearing specialist and other community agencies.

The Educationally Handicapped Program. Because speech and langu ge deficits frequently reflect perceptual and motor dysfunction, the spe ch and hearing specialists have been instrumental in providing significa t information to the referral process for this program. They have part cipated actively in differential evaluations and have assisted greatly n interpreting their findings to the classroom teachers. They have sub sequently worked with the teachers in modifying the classroom program to meet some of the special learning and communication needs of children with perceptual or motor learning problems.

The Compensatory Reading Program. Compensatory teachers in the saturation schools have used the consulting services of the speech and he aring specialist in many ways. The most frequent area of consultation has been in oral language acquisition and language development areas. Auditor y perception function and related teaching techniques have been discuss ed. Many teaching materials have been loaned to compensatory teachers by speech and hearing specialists for their consideration and use.

More Flexible Scheduling. The speech and hearing specialist serving full-time in a single target school represents the most effective use of specialist time. On very short notice, in most instances, the speech and hearing specialist can be available for consultation or evaluation when needed with no loss of therapy time to pupils. Grouping can be done much more effectively around specific needs of communicatively impaired pupils and with minimum conflict with each pupil's general schedule. Flexible scheduling permits the speech and hearing program to become an organically integral part of the entire school program as it changes and adapts to the needs of the pupils.

Innovations. Modifications and innovations in the speech and hearing services in saturation schools have had a significant and salutary effect on itinerant speech and hearing services. Full-time speech and hearing specialists in the saturation schools are in the process of developing and identifying relationships, materials and equipment, and techniques that can be used by itinerant speech and hearing specialists for increased effectiveness. These innovations can be tried most effectively through careful coordination of the small, cohesive professional group of four specialists currently serving target schools on a full-time basis.

Table 37 summarizes the pertinent enrollment data relative to speech and hearing services in the SFUSD for the school year, 1966-67, and compares these data with those for the school year 1965-66.

Line 1, 4 Saturation Schools, shows data for the saturation schools.

Line 2, 4 Matching Compensatory Schools, shows data for the four compensatory schools (served on an itinerant basis), involved in the research study on the Speech Development and Correction Program, ESEA.

Line 3, 20 Compensatory Schools, shows data for the remaining compensatory elementary schools being served on an itinerant basis.

Line 4, Total Compensatory Schools, shows the total for all of the 28 compensatory elementary schools shown in lines 1, 2, and 3.

Incidence of Communicative Disorders. Many students with communication handicaps may remain undetected because the itinerant specialist has to spend too little time in too many schools. From 9 percent to 11 percent of the elementary population in the District has been identified by speech and hearing specialists as communicatively impaired. This range remains constant when the 24 target schools are compared with the remainder of the District's elementary schools. With the more intensive

Table 37

NUMBERS OF PUPILS USING SPEECH AND HEARING SERVICES IN COMPENSATORY AND NONCOMPENSATORY SCHOOLS 1965-66 and 1966-67

Schools	Approximate Enrollment	1965-66				1966-67			
		Active	Waiting	Percent School Enrollment in Need of Service	Percent School Enrollment Served	Active	Waiting	Percent School Enrollment in Need of Service	Percent School Enrollment Served
4 saturation schools	2,247	156*	115*	15.7%	9.0%	380	81	20.4%	16.0%
4 matching compensatory schools	2,743	137	128	9.7	5.0	177	126	11.0	6.4
20 compensatory schools	11,843	591	519	9.4	5.0	664	408	9.0	5.6
Total compensatory schools	16,833	918	792	10.1%	5.5%	1,221	615	10.9%	7.3%
Other	34,681	2,123	1,579	10.5	6.0	2,092	1,207	9.5	6.0

---

* Figures for only three target schools; fourth school not saturated in 1965-66.

speech and hearing services in the four saturation schools, specialists have identified approximately 20 percent as communicatively handicapped.

Although it is expected that the incidence of communication handicap in junior and senior high schools would be less than in the elementary population, it is suggested that the current reported incidence of 1.5 to 3 percent is unrealistically low. Of the total speech and hearing services time available to the District, only 15 percent is assigned to junior and senior high schools; however, junior and senior high school enrollments represent approximately 45 percent of the total District population.

The percentage of speech and hearing handicapped children identified in the saturation schools is two times greater than the percentage identified in schools receiving itinerant speech and hearing services.

Impact of Saturation. The only significant differences evident between saturation and itinerant specialists on close study of mean average annual report data submitted by speech and hearing specialists are in the number of pupils served, in the preference of target specialists for group work rather than individual work, and in percentage of pupils served more than once per week. Annual report data indicating numbers of conferences, dismissals, case finding, and classification of disorders were very similar. The fact that these similar data apply to an average of four schools for the itinerant specialist and to only one school for the saturation specialist implies a considerable impact of the program on the target school.

Program Effectiveness as Evaluated by the ESEA Coordinator. The effectiveness of the Speech Development and Correction Program is reflected in the continually increasing enthusiasm for and interest in the program expressed by the principals, teachers, and ancillary certificated personnel serving in the four target schools. The program is increasingly perceived as an essential part of the basic school program, rather than as an ancillary service. The parents and community served by this program have also expressed appreciation of this service.

The four target speech and hearing specialists find their work in the target school setting challenging and absorbing. Their professional behavior and interaction is characterized by insight, perception, and effectiveness. The excellence of performance of these specialists is one of the primary reasons for the effectiveness of the program. Another primary reason for program effectiveness is the complete support given the program by the target school administrators, staff, and ancillary personnel.

Classroom Teacher Evaluation of Speech Development Program. Classroom teachers evaluated therapist services without regard to whether therapists were itinerant or assigned to saturation schools.

One question in the teacher questionnaire asked: "How many children from your classroom are receiving services from the speech therapist?" Replies were as tabulated below.

Number of Students	Number of Teachers	Percentage of Total Responses
None	108	26.2%
1	82	19.9
2	101	24.5
3	54	13.1
4	29	7.0
5 or more	21	5.1
No answer	16	3.9

A second question asked: "How much improvement have you been able to detect in the children from your class who are receiving services of the speech therapist?" Responses were cross tabulated against the number of students being served and are shown on the following page for teachers with one or more students receiving speech therapy.

The tabulation shows that the teachers' appraisal of the benefit of the speech therapist increases in proportion to the number of children helped.

Number of Students Receiving Service	A Great Deal	Some	Not at All	I Don't Know	No Answer
	Percentage of Teachers Judging Degree of Improvement				
1	18.5%	53.1%	18.5%	3.7%	6.1%
2	19.8	58.4	10.9	5.9	5.0
3	22.2	61.1	13.0	0	3.7
4	27.6	55.2	6.9	3.4	6.8
5 or more	38.1	61.9	0	0	0
Overall Percentage	22.0	57.3	12.2	3.5	5.0

Principal "Market Basket." The results of the principal "market basket" are somewhat mixed. In the four saturation schools, at current budget levels, two principals maintained present allocations for a full-time speech therapist. The other two reduced their expenditures to one-half and one-fifth time. Of the 23 target area schools, on the other hand, five reallocated funds from other areas to some additional speech therapist services from one-tenth to one-half time. The average for the five was about 30 percent of the time of an additional therapist. Changes from this level for a budget increase or decrease were about in proportion to the budget change.

To a degree, the speech therapist program may appear to be an important program to the principal but it is not focused on the pervasive problems of class size, instruction, and discipline that he constantly has to face. Many children requiring speech therapy are intelligent, orderly children who are achieving satisfactorily. Consequently, their special problems may be rated less important by principals of target area schools.

Community Teachers

The program description states that "Community Teachers . . . will work closely with the teachers in their respective schools, counsel pupils, and work with the neighborhood and community agencies. They will make home visits, visit classrooms to observe pupils, and confer with teachers and administrators about their findings. Community teachers will work closely with personnel in receiving schools, serving as the link between the child's neighborhood and his new school. Each community teacher will have 1 to 3 target area schools to serve, with a third time in each school being the usual arrangement."

The community teacher acts as a bridge between the school and the community, but should the bridge be primarily to community groups and parents' meetings or to students and their parents in need of help? Each combination of community teacher and school served has worked out a somewhat different answer. However, there is a general feeling among the community teachers that too much time is being spent on individual parent-child-school problems at the expense of broader community work.

Promising action toward more "open" schools and greater community involvement was taken by the Golden Gate Target Center schools in two meetings of principals, community teachers, and social workers in the spring semester. The following was reported in unofficial minutes of the meeting: one principal had done some checking "into prospects for release time for teachers willing to meet with parents in the evening and on other nonclassroom projects." This concept is gaining favor increasingly, as borne out by the Assistant Superintendent's announcement that in the budget there is a request for a corps of eighty (80) full-time substitutes, some of whose time could be used for this purpose. The Assistant Superintendent suggested that the people at the meeting be thinking of imaginative ways to use these substitutes. Since it is necessary to have both day and evening programs for parents and citizens in the schools, there was discussion of ways and means of getting people involved daytime, which is an especially difficult problem. Hunter's Point people (i.e., staff working in the Hunter's Point area) have been particularly successful in this through personal contact in the children's homes and community at large. It was suggested this might be easier in a project area. The recommendation was made that a workshop on getting parents and community people involved in schools in a positive way be part of the fall Institute."

While the above discussion may not have direct bearing on the community teacher, it relates to methods of building better bridges to the community, which is the community teacher's prime interest.

Both the Golden Target Center area and the Hunter's Point area referred to in the minutes are predominantly Negro areas. Somewhat less emphasis on community contacts occurs in the Chinese and Spanish-speaking areas. A principal reason for this appears to be the value of the community teacher in working individually with students and families who are unable to speak English. In some schools in these areas, the community teacher is the only member of the staff who can speak fluent Chinese or Spanish. Therefore, much more of the community teacher's time is spent with individual children.

The community teacher serving target area schools with a high Chinese population reports that 76 percent of her time is spent with individual children. In one school, she has established a special tutoring center for youngsters from Hong Kong. In the predominantly Spanish-speaking target schools, the community teachers report that about 50 percent of their time is spent with students. In the predominantly Negro and more mixed schools, a majority of the time is reportedly spent with parents, teachers, administrators, community groups, and in clerical work.

This difference was also reflected in answers to questions directed to the community teachers on the most satisfying feature of the community teacher assignment. The former group (Spanish-speaking and Chinese schools) tends to speak of experience with the child, while the latter group (Negro schools) speaks of experiences with parents, teachers, or groups.

Another split along these general lines is based on the reason for referral to the community teacher. In predominantly Chinese and Spanish-speaking schools, referral was usually for problems of language deficiency and academic skills. In Negro and racially mixed schools, poor discipline and psychological problems were more often the cause of referrals. In these mixed schools, community teachers typically were faced with the "problem" youngsters in the school. In these cases, previous efforts by the school have not been considered successful and the child is judged as alienated. The community teacher must work with these children within the school context since no other context is available.

Candid comments by a community teacher indicate some of the frustrations but also suggest positive changes that are felt to be needed:

> The main function of the community teacher seems to be that of a moderator . . . I counsel children, talk to their teachers, administrators, and parents . . . [Then] I try . . . to sell them some new ideas, programs, facts, and attitudes. [But] I feel a lack of enthusiasm and sense of adventure permeating the school staff . . . [There is a tendency for many to] believe that what was good for them is good, desirable, and effective in the case of the slum children of the 60s . . . the C-T [is] used mainly as another social worker on whom the worst behavior problems are literally dumped . . . the C-T then has to deal with these problems most of which are way beyond his control and power . . . there is little time or psychic energy to initiate new programs, much less promulgate new ideas. It is my opinion that . . . we need

> to make far reaching and courageous changes. We will have to staff all the slum schools with . . . adventurous, dedicated, and courageous personnel. In this framework the C-T program can be very profitable, significant, and useful . . .

The difficulties that prompted this statement are also implicit in classroom teachers' evaluations of the effect of community teachers on children in their classrooms. In comparison to other subprograms, the ratings of the community teacher subprogram are very low.

It is obvious that principals need assistance with "hard core" problem students, but it is not clear that it is most effective for the school to concentrate the capabilities of community teachers on "problem" students. Preventive efforts with students may be a more effective use of community teachers' time in the long run.

The community teacher is directly involved in a critical and rapidly changing area of educational theory and practice--the relationship of inner city schools to the minority groups they serve. For maximum effectiveness, a community teacher must represent both:

1. The school and the benefits it offers to minority groups.

2. The minority groups' needs and feelings so that the school can develop programs to serve the minority groups effectively.

This position puts great strain on the individual, and the temptation is always to fill only half of the role. The modes of operation that community teachers have evolved, their successes and failures, and alternatives for greater staff involvement in the target area community need to be carefully analyzed. Such analyses may provide San Francisco with the data required to design "community schools" suited to the District's unique needs.

Teacher Questionnaire. In the elementary teacher questionnaire, questions were asked of classroom teachers about the relationships between their students and community teachers.

The first question asked: "How many children in your classroom have received some services from the Community Teacher assigned to your school? " Responses were as tabulated on the following page.

Number of Students	Number of Teacher Responses	Percent of Total Teacher Responses
0	172	41.7%
1	55	13.3
2	76	18.4
3	24	5.8
4	22	5.3
5	17	4.1
6-8	7	1.7
9-11	4	1.0
12 or more	2	0.5
Don't know	30	7.3

The second question asked: "If one or more of the children from your class have received services from the Community Teacher, have you noticed any changes in the following [behaviors]?"

Only teachers with one or more students receiving service are included in the tabulation on the following page.

The third question was: "Are you sure that the Community Teacher was the major cause of those characteristics that improved?" Responses by teachers having one or more students affected were as tabulated below.

Response	Number of Teachers	Percent of Teachers
Yes	73	35.4%
No	93	45.1
No answer	40	19.4

	Degree of Change Noted				
Behavior Category	A Great Deal	Some	Not at All	I Don't Know	No Answer
They are more likely to seek help from me	10.7%	39.3%	32.0%	7.8%	10.2%
They seem more relaxed and happy	7.3	35.9	38.8	8.7	9.2
Their attendance has improved	7.3	21.4	51.9	8.3	11.2
They seem more interested in school	6.3	41.7	38.8	5.8	7.3
They are better behaved in the classroom	6.3	41.3	39.8	5.8	9.2
They are more attentive in class	4.9	41.3	38.8	6.8	8.3
They seem to be doing better academic work than before	4.4	39.8	38.8	7.3	9.7
They are more responsive during class	3.4	41.3	40.3	5.8	9.2

In all cases, the "not at all," "I don't know," and "no answer" categories combined have a majority of the responses.

Finally, teachers were asked: "Have the services of the Community Teacher been available when needed?" The responses by all elementary teachers are tabulated on the next page.

Response	Number of Teachers	Percent of Teachers
Always or almost always available	108	26.2%
Usually available	89	21.6
Sometimes available, sometimes not	53	12.9
Seldom available	17	4.1
Never or almost never available	8	1.9
No answer	133	33.2

Principal's "Market Basket". The percentage increase under the 1966-67 budget in allocations for community teacher services is the largest for any category of personnel. (The 1966-67 budget provided one-third of a community teacher per school). Six principals did not make any allocation for a community teacher, but four wanted full-time ones. The general nature of the allocation for 23 target area schools is shown on the next page.

	Number of Principals out of 23		
	1966-67 Budget	25 Percent Decrease	25 Percent Increase
Average change in allocation compared with 1966-67 budget	+26%	-17%	+50%
Number of principals who chose:			
No community teacher	6	8	4
Less than one-third time	1	5	1
One-third time (present allocation)	5	1	2
More than one-third time but less than full-time	7	9	11
Full-time community teacher	4	0	5

Since there is more diversity in the operations of community teachers than in other categories of personnel, principals respond to several different impressions of the community teacher. Nevertheless, nearly half (11 out of 23) of the target-school principals have chosen to expand their programs and less than a third (7 out of 23) chose to decrease it, which is a very positive response to the services of community teachers.

Social Workers

Social workers are provided to elementary and high schools through the SFUSD budget. Generally, each social worker has five elementary schools to cover. Under ESEA funding, three saturation schools were each assigned a full-time social worker. In the fourth school, which is extremely small, the ESEA social worker also operated in three other schools. These four social workers serve the children enrolled in both the prekindergarten and elementary grades. Prekindergarten students in other schools are served by regular Child Guidance Services staff social workers.

Services provided by ESEA social workers were similar to those offered by the regular Child Guidance Services program and included case work help to parents and children, consultation with faculty members about learning difficulties and behavior problems of children, and participation in community organizations. The chief difference between ESEA and other social workers lies in the reduced school load to provide opportunity for work in depth and for earlier interventions before situations become too serious. An immediate effect of the reduced school load is the fact that, for the three saturation schools with full-time social workers, the average number of cases is 84 per school. In other target area schools, the average number of cases is 17 per school.

Examples of some of the service provided by social workers are:

1. Interviews with children who are experiencing difficulties in learning and their parents.

2. Referral to community agencies for further assistance and interagency conferences for joint planning.

3. Group meetings with mothers of new entrants to school, activity group therapy with students with problems, and assistance in the planning and conducting of parent-educator meetings at all prekindergartens.

4. Development of weekly case conferences with faculty members and all special service staff for the purposes of sharing information and providing opportunity for joint planning to avoid duplication of efforts.

5. Meetings with faculties to provide information about programs of community agencies.

6. Assistance in plans to involve leading citizens from minority ethnic and cultural groups in various educational activities to improve the aspirations of pupils.

7. Assistance to principals in the inauguration of regular meetings with administrators and special service staff or neighboring schools for the purposes of sharing information about students, exchanging experiences, and promoting more orderly transition from one school level to another.

The effect of ESEA social workers will not be evaluated separately since this effect is included in the evaluation of the total effect of the saturation services on the four schools and the other 24 target area schools. However, the effects of both ESEA and regular District social workers on target area students is evaluated below.

Staff Questionnaire. An analysis of the way in which ESEA social workers and regular staff social workers reported that they used their time did not show any significant differences. The way in which all the ESEA and most of regular staff social workers used their time was distributed as shown on the next page. In the same questionnaire, in response to a question on the most satisfying element of their assignment, social workers said they found contact with teachers and administrators to be more satisfying than contacts with students. It is clear from the comments that rather than trying to help the student all alone, the social workers are trying to work with school staff and administrations to provide the student with an environment in which he can succeed. This finding is consistent with the low percentage of time the social workers report for direct contact with individual children. Given the perspective into the target area student's life that the social worker has by training and experience, working with the staff should constitute a most valuable and important role.

Activity	Percent of Total Time
Contacts with individual students	5-20%
Contacts with parents	10-25
Contacts with teachers, administrators, and other school staff	20-40
Contacts with other agencies (Juvenile, Court, Health Department, private agencies, etc.)	15-25
Maintaining records and preparing reports	5-20
Other (travel, meetings, and symposia)	5-15

Teacher's Questionnaire. In the elementary teachers' questionnaires, three questions were asked about social workers. The questions and responses appear below. "How many children in your classroom have received some services from the Social Worker assigned to your school?"

Teachers' Response	Number of Teachers	Percent of Responses
Don't know	85	20.6%
None	199	48.3
1	40	9.7
2	33	8.0
3	23	5.6
4	10	2.4
5	9	2.2
6-8	8	1.9
9-11	3	0.9
12 or more	2	0.5

From these replies, it appears that 68.9 percent of the teachers do not have students that receive social work services directly. This is consistent with the low average number of cases for the target area schools of 17 per school.

"If one or more of the children from your class have received services from the Social Worker, have you noticed any changes?"

	Percent of 128 Teachers Reporting Some Students' Receiving Services			
Changes Noted	A Great Deal	Some	All	Don't Know or No Answer
Attendance has improved	5.5%	19.5%	48.4%	26.6%
Seem to be enjoying school more than before	4.7	20.3	42.2	32.8
Seem more relaxed and happy	4.7	21.1	41.4	32.8
More likely to seek help from me	4.7	27.3	37.5	30.5
Better behaved in the classroom	3.9	26.6	43.0	26.6
Seem more interested in school	3.1	24.2	45.3	27.3
Seem to be doing better academic work than before	3.1	22.6	46.1	28.1
More attentive in class	2.3	23.4	47.6	26.6
More responsive during class	1.6	25.0	46.9	26.6

"Are you sure the Social Worker was the major cause of those characteristics that improved?"

Teachers' Response	Number of Teachers	Percent of Responses
Yes	20	15.6%
No	69	53.9
No answer	39	30.5

As measured by responses to these questions, the social worker's contribution to services supplied to target area schools seems small, but this is not surprising. The social worker deals with the more difficult problems in the student population, and the large student population covered by the staff social worker means that the social workers must operate within a tight schedule and that they see only the most severely disturbed children. Consequently, while the services are important and the successes with individual children are real, the emphasis is on treatment rather than prevention.

The best hope would seem to lie in preventive actions with students, parents, and school staff and administration. This is the most interesting aspect of the full-time social workers' assignments in the three saturation schools. Since more students per school can be helped, the cases tend to be less severe and more preventive in nature. Also some of these social workers are becoming involved in attempts to improve relationships between schools and the target area community. Some projects such as meetings with new parents were initiated by the social worker in one school. In others, the social worker is part of a team composed of principals, community teachers, and members of the district staff who are seeking better relationships with the community.

Much of the literature on education in the central city states that better school-community relationships are the most important needs for better education. However, the history of projects that have been directed towards school-community relationships reveals that many projects with the best intentions have had few positive results. It appears that the approach of those attempting to improve school-community relationships is a much more important determinant of success than the formal objectives or techniques. Consequently, projects that involve the community, such as those of social workers, community teachers, and the Guidance Service Center, need to be carefully monitored so that activities can be separated from accomplishments.

Principal "Market Basket". In the principal "market basket," two of four of the target area schools "purchased" from one-tenth to one-half of a social worker. Since any purchase was in addition to district services already provided, this response can be considered positive.

Librarians

Each of the 24 target area schools and the four saturation schools has a functioning library. In general, each elementary school librarian is assigned two schools and divides her time between them. Some variation among librarians occurs due to needs and conditions within each school. An ESEA resource librarian also provides assistance and supervision to the librarians.

In most schools, it has been possible to create a separate library. However, programs are being carried out in schools with minimum facilities by going directly into the classrooms if necessary. Librarian salaries are provided by ESEA funds; library materials were provided through a combination of funds.

Staff Questionnaire. Librarians must spend time in selecting books, operating the library, assisting teachers in selecting books and material, and in serving students directly. In their questionnaire, the librarians provided a breakdown of the use of their time during a given week. This breakdown showed that approximately 50 percent of their time was spent in working directly with children.

Teacher Questionnaire. The response of teachers to the librarians' questionnaire was very positive. Question 11 and responses to it are shown on the next page.

Question 12 was an open-ended one: "In the future, what services would you like to receive from the librarian?" The responses were generally very positive in tone. Many teachers stated simply that the librarian should have more time in the school. Others indicated that more storytelling and help in locating library material were desired.

The principal problem area revealed by the responses (other than better facilities in schools without a separate library) was expressed in such comments as "need more lower-grade books," or "have more easy-to-read books." Many teachers feel that more books designed for beginning readers would be desirable.

A Great Deal	Some	Not at All	I Don't Know	No Answer	Have the following services of the librarian in your school been helpful to you?
57.5%	25.2%	5.1%	1.9%	10.2%	Setting up the school library
42.7	32.0	10.2	3.2	11.9	Locating materials
39.1	26.0	17.0	3.2	14.8	Instructing children in library skills
36.9	34.5	17.7	2.2	8.7	Storytelling

In question 29 concerning the usefulness of materials and equipment in teaching, library books were rated by 66.5 percent of the respondents as "a great deal" of help. This was the highest rating given any of the materials and equipment.

Principal "Market Basket". In contrast to the reports of classroom teachers, the principal "market basket" indicated that a decrease may be warranted in librarian services if a limited budget prevails. As shown on the following page, even with a 25 percent increase in funds, the principals would decrease library services by 6 percent from the current level. However, as with other services, the principals are divided in their opinion--some want no librarian and others wish to increase library services.

The apparent difference between the responses of principals and the teachers can be partly explained by the nature of the questionnaires. Both the services evaluated by the teachers and the objectives listed by the librarians are library-oriented. The librarians undoubtedly provide valuable aid in providing such services and reaching those objectives. However, the principals were thinking of the overall needs of the school. These include helping each student develop a capability to read, reducing the problems faced by classroom teachers in the management of large classes, and ameliorating school-home conflicts. In view of this overall picture, many principals placed lower priority on librarian services than some other compensatory services.

	Present Budget	25 Percent Decrease in Budget	25 Percent Increase in Budget
Percent change in total expenditures from current	-20%	-54%	-6%
Amount of librarian services purchased by number of schools			
No librarian	4	9	4
Less than half	6	8	3
Half	10	6	12
More than half but Less than full	1	0	0
Full time librarian	2	0	4

Reading Clinic

The reading clinic was established to handle severe reading disabilities that could not be effectively handled in either the regular classroom or through other compensatory projects. The approach to each student begins with an extensive diagnosis of his particular disabilities. The personnel are trained as clinicians and generally work with the students on an individual basis, although some work with small groups is also done.

The project operates in two phases. The first phase is the diagnostic program during the summer; the second, or remediation, phase is operated during the school year.

Diagnostic Program. The initial diagnostic work was started in the summer of 1966. The Diagnostic Center ran from Monday, June 20, to Friday, August 12, 1966; 289 children were referred.

The staff consisted of two teams, each with one social worker and three psychologists. The project head and the physician on the staff met with each of the teams when cases were ready for staffing and assisted in writing the necessary reports for the schools.

Of the 289 children referred, 123 were put through the complete program. It was found that the referrals were excellent in that the youngsters referred were intelligent but disabled in reading.

The tabulation below shows the sources of the referrals.

	Number Referred	Number Completed	Percent Completed
Public elementary	141	62	45%
Parochial elementary	50	17	34
Public junior high	76	32	42
Public senior high	22	12	55
Total	289	123	43

The diagnostic program was also run during the summer of 1967. There were 243 students referred, and 141 cases completed. Data on referrals and their disposition are shown below.

	Number	
Students who came to the clinic	153	
Cases completed		141
Students who did not complete appointments		11
Cases finished but not staffed		1
Families contacted that did not keep appointments	22	
Families that could not be contacted by phone or postcards	68	
Total referrals	243	

The 123 completed cases in the summer of 1966 yielded the following data:

1. The mean IQ on the full scale of the WISC (Wechsler Intelligence Scale for Children) was 90 with a range of 67 to 122. A sidelight on the WISC testing was that 58 percent of the scores were higher on the performance than on the verbal scale. Of these, the average discrepancy was 15 points higher--an unexpectedly large discrepancy for such a large group.

2. Sixty-four percent of the referrals were diagnosed as having social problems and 57 percent as having psychological problems.

3. Fifty-eight percent of the students tested for perceptual problems were found to have them; 68 percent of those tested for dominance problems were found to have crossed or mixed dominance.

4. Reading retardation on the Wide Range Achievement Test ranged from +.3 to -8.1 grades. The mean, median, and mode all fell in the "-2.0 to -2.5 grades retarded" interval.

The students referred were actually disabled readers of normal intelligence with multiple problems. Reports of each of the cases, including social service, medical, and psychological data, were sent to the student's school, and a copy was retained at the clinic for future use.

The summer program also used a wide variety of tests in search of the most economical and effective ones. An evaluation of the 10 tests most used in the summer program was made. Based on this survey, the number of tests given in the summer 1967 program was substantially reduced with no apparent loss of pertinent data.

Remediation Program. The Reading Clinic was staffed by a project head and three clinicians. The clinician positions were filled with three experienced teachers although they were not specifically trained in reading. One teacher reported on October 1, one on October 15, and a third on November 1. Each spent some time with the project head reading and analyzing diagnostic folders, examining test procedures, reading test manuals, and planning methods to use with the children. Two of the teachers also enrolled in university courses in reading. Every Wednesday was set aside for staff meetings during which cases were reviewed, technical knowledge exchanged, procedures worked out, and materials and methods evaluated. At the semester break, several formal meetings were held and visitations were made.

The project head reports that these teachers "now know tests and measurements in reading; have improved their interview techniques; know community and district resources; know the available materials, methods, and machines and how and when to use them. In short, they have every right to be called reading specialists or clinicians."

The clinic served both elementary and high school students. Two of the clinicians served elementary school students. The students were seen four times a week for 30 to 45 minutes each. When the movement time between schools was considered, the load for each clinician was reduced to 8 students with a total of 17 elementary students seen during the term. One clinician served the junior and senior high schools on a small group basis. In this way, 19 junior high and 9 senior high students were served.

As part of its diagnostic and followup work, the Reading Clinic provided an evaluation of its services. The following is quoted from the project head's report:

> In order to evaluate progress toward this goal (reading improvement), all the children were retested on the Wide Range Achievement Test because it was the universally used reading test in the Summer Diagnostic Program of 1966, although it does not measure comprehension, but only word recognition and analysis. Secondly, all teachers (English or reading teachers only at the secondary level) of the children were surveyed, and lastly, parents of all the children were surveyed.
>
> On the retest at the elementary level, where the children were seen four times a week from 30 to 45 minutes, the results were most gratifying. All the children gained, no matter what their handicaps were. None came up to grade level, but with an average IQ of 89, these youngsters would have a struggle to read at grade level, even if they were not disabled. On the other hand, if one compares their progress this year, with six months of remediation added to their schedules, to their average progress in other years, one finds phenomenal growth ranging from 140 percent faster to 11 percent faster and averaging 75 percent more progress with the help of the reading teacher. The greatest growth was achieved by a sixth grader whose reading learning rate accelerated to 140 percent. She will go into junior high two grades retarded still, but she could achieve grade level next year and she will have a fighting chance in the seventh grade.

The retest results on the secondary level were not as spectacular as on the elementary. In addition to the difficulty of the problem, the teacher was able to meet the secondary students only once a week for the first semester and only twice a week in groups of two or three the second semester, so that these young people received about one-fourth the teacher time that the elementary children did. However, even under such a handicap, more than three-fourths made substantial gains.

One junior high school boy had been rejected by the University of California Learning Center because of a multiplicity of problems among which was the fact that he read at grade 1.8 in the ninth grade. Although his reading growth was less than a year in the Reading Clinic, his progress was real for a boy with an IQ of 84 and a history of learning disability. When his teacher called his mother on a routine matter, she broke down and cried while thanking him. Another boy who made a year's progress after seeing the reading teacher has an IQ bordering on mental retardation and a predelinquent behavior pattern, but he is faithfully doing his work at the Clinic and is making progress.

Five of the young people did not make gains; some even registered losses on the retest. Of these five, three are penalized by the test because they are bilingual (Chinese) and two were boys who did not keep every reading appointment.

Teachers' Opinions of the Reading Clinic's Effectiveness. Another method of assessing reading progress of the students was a survey conducted by reading clinic personnel of teachers' opinions. Ten questions were asked--four pertaining to school behavior, four to academic change, and two to lost class time and the future of the Reading Clinic.

Of the questions on pupils' school behavior, approximately 40 percent of the teachers said it improved and 60 percent said that it had not. However, half of the latter went on to explain that these had always been "good" children without attendance or behavior problems. Of the academic questions, pupils' improvement in self-confidence was answered "yes" by 78 percent and "no" by 22 percent. Improved achievement in class was noted by 67 percent and improved effort by the same percentage. "Does he follow directions more readily?" was answered "yes" by 79 percent and "no" by 21 percent.

The last two questions of the teacher survey--"Do you feel the time lost from class justified?" and "Do you feel the program should be expanded, left as it is, contracted, or discontinued?"--were overwhelmingly favorable to the Reading Clinic program. The percentage "yes" on the first was 79; on the second, 80 percent were for expansion and 20 percent for "as is" with none for "contracted" or "discontinued."

The teacher survey suggests that although the Reading Clinic did not improve behavior in class, it did improve in class effort and achievement, and that most teachers approve of the program and would like to see it continued.

The last effort to evaluate the teaching program was a survey of the parents of whom 80 percent responded. To the question, "Does your child take more of an interest in school?", 90 percent responded "yes." Eighty-two percent said grades had improved; 87 percent said the child likes school better. Eighty percent said the child likes to go to the Reading Clinic, but only 66 percent said he reads more at home. Eighty percent report that the child lets people help him more readily, and 94 percent report that the child understands the purpose of the Clinic. Only 83 percent said the reading teacher had helped their child, but 90 percent want the program next year and 78 percent are interested in a summer program.

The Project Head reports: "As heartening as these replies are from parents, their comments were even more exhilarating. For instance: 'He volunteers to read out loud . . .' or ' . . . he found out reading could be enjoyable.' Two parents commented that their boys have acquired more confidence in themselves. Several parents said the teachers were good or 'helped in many ways.' The mother of a girl who showed no improvement on the retest said that now her daughter 'buys books at the Five and Ten'; another is 'reading more.' The mother of a boy who showed no improvement on the retest says, 'He reads the paper and books at home . . . there's improvement in grades.' Comments from parents like the following make reading remediation satisfying work: 'Vincent really learned how to read . . .', ' . . . he now likes to read.' But one mother touched us all when she wrote: 'My son has changed more than I can say.'"

Teacher Questionnaire. The results of the teacher questionnaire are ambiguous. According to Reading Clinic records, 17 elementary students were seen by the Clinic. However, the teachers reported as follows: (1) 12 teachers had 1 student who received services, (2) 7 teachers had 2 students who received services, and (3) 14 teachers had 3 or more students who received services. This suggests a minimum of 68 students who received the services. Either the teachers were mistaken or were including summer diagnoses as services. In any case, these teachers rated the Reading Clinic more favorably than any other compensatory service.

In answer to the question: "How much improvement have you noticed in the reading skills of your children attending the Reading Clinic?," teachers responded as follows:

A great deal -- 12 teachers (36.3%)

Some -- 14 teachers (42.4%)

Not at all -- 7 teachers (21.3%)

Of these, nearly half said they were sure that the Reading Clinic was the major cause of the improvement in reading skills.

Principal's "Market Basket". The 17 elementary students were drawn from 8 different schools. Under all budgets, the number of students that principals wished to be served by the Reading Clinic increased.* However, except for the 25 percent greater budget, the number of schools participating in the Clinic decreased from the present 8. For example, under the current budget, 2 schools wanted 10 students in the clinic, 2 schools wanted 5 students, and 1 school wanted 1 student for a total of 31 students from only five schools.

Child Welfare Coordinator's Analysis. The coordinator of child welfare also surveyed the elementary and secondary principals concerned with the program during the first two weeks in May, with the following results.

In response to the question "Does the . . . program fit smoothly into your school's total program?," 73 percent answered "yes." Of the dissenting 27 percent, 75 percent indicated under "Comments" that their objection was based on the fact that their students have to leave school and travel some distance to the reading teacher. The Reading Clinic staff dislikes this fact as much as principals, but consider it one handicap that cannot yet be changed because limited Reading Clinic staff and severely limited space in the schools. The number of youngsters eligible for the program was greater than the available space could handle.

---

* This may have been partly due to the fact that the Reading Clinic was by mistake underpriced per student in the price list.

To the question; "Do you feel the program's results justify the lost class time of the students?," 86 percent of the principals responded "yes," and 14 percent said "no." In addition, in answer to: "Do you believe this program should expand, remain as it is, be made smaller, or be discontinued?," 86 percent checked "expanded" (presumably into their schools), 14 percent said "remain as it is," and none checked either "be made smaller" or "be discontinued." However, one senior high school that must send its students off campus for reading help did not respond to the question so it was not counted in the results. Nevertheless, the principal's delegate made it clear by her comments that she did not approve of the program or feel that it had benefited the students.

On the other hand, two schools requested more service, especially daily service for junior high school age children. Two principals commented on the worth of the diagnostic services, and several commented on the excellence of the teachers.

To the question: "In your estimation, what percentage of children in your school could benefit by the program?," principals' estimates ranged from 1 percent to 50 percent with 60 percent of the principals estimating between 5 percent and 10 percent.

In total, the evaluation of the principals via the director's questionnaire generally was favorable to the program. However, for all elementary principals playing the market basket game, the service does not have wide appeal. The elementary principals' main objection was the need for the students to travel to a Reading Clinic.

Community Resource Teachers and the Guidance Service Center

The community resource teacher and Guidance Service Center are two distinct subprograms. The first was the effort of a single person and operated until March 1967. The second started in April 1967 and in-service training began during the summer. In the fall, a staff will be operating at three centers throughout the city to provide comprehensive services on a team basis. Both subprograms are focused on students who are not fitting into the formal school system. While a number of similarities exist among those served, each case has its individual problems and requirements for types of aid. Therefore, no formal evaluation will be attempted. Rather, the memoranda and reports prepared by the former heads of the subprograms are quoted to indicate the style of operation and the subprogram effect.

The Community Resource Teacher Subprogram. The purposes of the community resource teacher position were:

> To extend, on an individual basis, a sustaining arm and helping hand to boys and girls planning to forsake their education heritage in the despair and peculiar frustrations of the dropout.
>
> To act as catalyst, interpreter, and liaison between the many professional guidance and other youth welfare services offered by the schools and the child, the parent, the community itself.
>
> To go one more mile beyond endurance in the attempt to help the student keep his grasp on educational opportunity, whatever the situation created to meet his particular needs might be.
>
> To provide, when needed, intense counseling service on an individual basis heretofore unprecedented because of prohibitive case loads.
>
> To mobilize every resource and service within the general community which might help meet the needs of the individual youth as he struggles to fulfill his drives and ambitions, so that he will not become a dropout.
>
> To aid boys and girls to move towards long-range objectives of positive individual development and societal contribution. The dynamics of upgraded vocational training and employment, continuing education, special tutoring, group therapy, follow-up casework, will nurture an awareness that 'the school does care' what happens to the boy or girl who often does (but must not continue to) think he is a loser.
>
> To motivate other boys and girls still in school, but unsuccessfully meeting their responsibilities, to contact and learn from previous dropouts--psychological as well as physical--more positive patterns of behavior through attitudinal change and growth.

In the report, a number of sources of referrals to the community resource teacher were listed including the following district sources:

1. Dean of boys, dean of girls.

2. Head counselors and staffs

3. Attendance supervisors

4. Probation officers, social workers, and social welfare workers

5. Child welfare services

6. Office of the assistant superintendent, human relations

Referral sources from outside the district were:

1. District offices of the economic opportunity council

2. California state employment services (youth opportunity centers)

3. Mission Rebels (Private, nonprofit youth-serving organization originally designed to "salvage" Mission District youth.)

4. Youth

> The most frequent referral source is an unexpected one. Boys and girls tell each other to call upon the resources teacher to see 'if you can get something lined up the way I did.' This is especially true of those at Youth Guidance Center, as well as those youth getting what they call an 'unfair shake' in being pushed out of school."

The case load undertaken by the community resource teacher was limited to 50. In a report on some of these cases, it is obvious that the community resource teacher could not work miracles; however, a large number of the cases were starting to cope with their problems and showing signs of maturing.

The Guidance Service Center. Comments concerning the Guidance Service Centers are quoted below.

> For some time it has been apparent that the facilities of San Francisco Unified School District are not adequate to serve the type of student who is repeatedly in difficulty with the school. He is disrespectful of authority, and a threat to the education of his fellow students. Counselors, field administrators, teachers, and the Child Welfare staff are most reluctant to exclude these pupils, realizing that there is little or no help for them on the outside.

The vast majority of these pupils have been disciplined within the framework of their schools with little, or temporary, success. To meet the needs of these extreme cases, additional specialized staff and facilities are required at all three instructional division levels.

When the schools have exhausted their efforts there is no program to send them to at the elementary or junior high school level. The senior high division has a program at Samuel Gompers High School but, due to the complexities of programming at that school, all would agree there is room for improvement at that level also.

At the present time the Guidance Service Center is the only planned and functioning program in the District to which a youngster may be assigned whose ten days of suspension are exhausted; or who, by violence, by language and behavior has transformed his classrooms into places unfit for the learning process and made them places of aversion for his teachers and peers.

Set up to offer individualized instruction to the child who does not maintain himself productively in the classroom with his peers, these centers have already achieved some significant returns.

These positives will be considered briefly from the following approaches:

1. Unique personnel coordination.

2. Functional school-agency-community correlated effort in behalf of mutually shared child or youth.

3. Individualization of instruction and exploitation of teaching-learning processes and procedures to suit needs and interests of the particular student.

4. Constant and continuous parental involvement in the program.

1. Personnel Coordination. The team of psychologist and social worker making the initial contact with parents and children assigned to the Guidance Service Centers offers motivational strength unprecedented for the teacher's acceptance by the child who has previously been a problem of some pronounced type in the usual class set up. Then, with this initial advantage deepened by the teacher's close professional association with the "Parallel Staff," there is constant interchange and reciprocal strengthening in the concerted approach to the challenge of the individual child's problems. The guidance offered the teacher, plus the physical presence of Parallel Staff at times of potential crises, make the instruction so well-suited that the teacher is often able to anticipate the amazing effectiveness of the reaction of the child to some innovative technique or to some common demand in the school set up, heretofore insurmountable in difficulty of one sort or another to the child.

2. Functional school-agency-community correlated effort. A great deal of time is spent by the indefatigable social worker-psychologist teams (Parallel Staff) in the process of admission of a child to the Guidance Service Centers. They assign cases among themselves following the allocation of the youngsters by the Child Welfare Staff at its weekly meetings. They study the cumulative record folders; they meet with parents and youngsters at the home and then at the Center; they confer with the Director of the Centers prior to her meeting with the parents; they contact the agencies involved with the child and work on ways to correlate effort, share pertinent information, do follow up contacting; plan transportation; explain the GSC program; aid parents and children to overcome hostility and resentment toward the school system in general, or some particular school. Sometimes, after extensive conferences with "sending school" administrators and others involved, a request may go back to the CWS staff for re-consideration and assignment of the child to another situation more nearly able to satisfy the need. Thus, much work is involved in the Centers regarding the life of a youngster who may never actually be enrolled.

3. Individualization of instruction. Every teacher (seven in number), as well as the Parallel Staff, has emphasized the growing returns in increasing interest, motivation, and performance of the youngsters. This follows directly from the testing services of the psychologists, the Wide Range testing

by the teachers, plus the structuring of methods and materials to each individual child according to his needs and indicated potentialities.

Miracles are not wrought overnight, but in the extremely brief time of their existence the Guidance Service Centers have run up an attendance and punctuality record that is the envy of a regular school. This would indicate an urgent need is definitely being met in a way in which the so called normal classroom in its very set-up could never serve. The socialization of the child and his gradual return to a normal school situation will constitute the most severe test the Centers must face in the future. For some of the children, the time is drawing near; for others it will be a while before the teams of teacher-psychologist-social work-CWS staff will deem it timely to proceed with demission from GSC to the regular school.

4. Parental involvement. The program of the Guidance Service Centers is a part-time one. Consequently it is crucial that the parents know and understand its general functioning, aims, goals, procedures, and problems. They must sustain in the out-of-school hours to the best of their powers the values in attitudinal and behavioral rehabilitation that the GSC program seeks to objectify.

The parents have demonstrated already a keen interest without exception. We have seen hostility change; we have seen bitter despair with the youngster begin to show a ray of hope that there is a chance; we have seen the interpreter and "communicator" between the home, the school, and the community youth-serving agencies involved.

The staff is remarkably dedicated. No effort is spared; no time is counted when there is a possibility of discovering a new way to approach a heretofore "Unreachable" youngster; no hesitation exists in asking the assistance of Parallel Staff or other resource personnel in looking at a particularly acute problem from any approach that may accomplish benefit for the child.

This program will expand. At present, (June 30, 1967) its 73 enrollees extend from Grade 4 through Grade 12.

There are 22 boys at the elementary level and no girls;

20 boys at the junior high level and 15 girls;
14 boys at the senior high level and 2 girls.

We have kept the enrollment low because of difficulty in obtaining staff since replacements at the elementary level were impossible in March, 1967, and almost as unattainable at the other divisional levels. Since this is an experimental program, the limit has been set at 60 pupils at each divisional level or, 180 for the total program. A staff of approximately 20 professionals, distributed over social work, psychology, and teaching personnel, with administrative assignments included is also planned.

It is clear from these extensive quotations from memoranda and program plans prepared by the original head of the Guidance Service Center that the effort is characterized by intense convictions about the need for highly individualized assistance to misfits in the academic establishment. Comprehensive evaluation of the Guidance Service Center will call for sophisticated application of cost-benefit analysis. The program will be monitored throughout 1967-68 and will be the subject of a memorandum report before the end of the 1967-68 school year.

The Language Arts Program in Homes for Neglected and Delinquent Children

Language arts programs for two homes for neglected children and one home for delinquent children were organized late in the spring of 1967. The program for the two homes for neglected children is described below, along with a statement of how it is expected to meet the special educational needs of the participating institutional children. The program in the home for delinquents follows the same general lines.

The area of greatest need is that of improved reading ability. It is recognized that if the participants in the program can improve their ability to read, they can gain success in other academic areas.

The approach is through diagnosis and then planned remediation. Recognizing that there has already been no remediation through the use of existing printed materials and also knowing that lack of experiences have mitigated against learning, the staff uses new techniques. These include opportunities for actual experience, which hopefully will lead to purposeful oral and written expression. New books, materials, and equipment have been introduced to help create interest in learning.

Tapes prepared by teachers as well as commercially prepared tapes and records are used with both large groups and individuals. Film strips and films are also used.

Services of a librarian and resource teacher at one home enhance recreation and leisure time reading. These teachers work closely with the reading specialist in planning trips to adjacent areas of the city. Together, they select books related to these excursions, develop lessons, and escort the students.

A sewing machine, typewriter, and other educational equipment are being purchased. These are especially necessary for improving skills. Sewing patterns have been purchased so that the girls may have a reason to read, i.e., to follow directions when making clothes of their very own.

The typewriter enables the girls to record their activities. At the same time, typing skills are taught. The use of both the sewing machine and typewriter enables the girls to leave the Center with skills needed in later life.

Guidance and counseling time have been provided throughout the summer months. Two consultants were employed to work with the staff to provide more time for each girl on an individual basis. Group therapy is also used.

The special reading program at the other home enables the staff to make diagnoses, provide a motivational approach, and introduce special equipment. Although a large initial investment is required, the equipment can be used for many years for these and other wards of the court.

A specialist was invited to work with the teachers in the development of additional uses of the audiovisual approach. In this way, all teachers serving at the home may eventually use the TV recorder and language laboratory. The purchase of special books, tapes, and recordings make it possible to initiate the development of an on-the-site learning materials center.

Enrichment Experiences

The enrichment experiences subprogram provided academic and cultural enrichment opportunities, primarily field trips and paid admissions to cultural events. Provision for paying transportation and admission costs enabled teachers to plan experiences related to subject areas and enrichment. The use of these experiences as a basis for later work on oral and written expression was used extensively in both compensatory and regular classrooms.

The compensatory funds allocated to these purposes are in addition to limited district funds for field trips. The same is true of the target area parochial schools whose students participated in cultural enrichment experiences. It is not possible effectively to separate the evaluation of the field trips by the source of funding from either the teachers' or principals' points of view. Consequently, the evaluation is of the total field trip program in the district regardless of funding sources.

Teacher Questionnaire

In the elementary teacher questionnaire, questions 24 and 25 concerned field trips. Question 24 asked: "How many field trips has your class taken this school year (1966-67)?" The responses were as tabulated below.

Number of Trips Taken	Number of Teachers Responding	Percent of Responses
None	50	12.1%
1	114	27.7
2	87	21.1
3	64	15.5
4	48	11.7
5 or more	47	11.4

Question 25 concerned the success of the trips: "Considering all the field trips your class has taken this year, how successful would you judge field trips have been?" The responses were as tabulated on the following page.

Evaluation of Success	Number of Teachers Responding	Percent of Responses
Very successful	242	58.7%
Somewhat successful	113	27.4
Generally disappointing	6	1.5
No answer	51	12.3

Together, district-funded and compensatory program-funded field trips provided trips for 87.9 percent of the classes in target area elementary schools. Of this 87.9 percent, teachers rated the service very successful in 66.8 percent of the instances.

A cross-check of question 24 and question 25 resulted in the tabulation below.

Number of Trips	Very Successful	Somewhat Successful	Generally Disappointing	No Answer
1	50.0%	44.7%	4.4%	0.9%
2	63.2	34.5	1.1	1.1
3	81.0	19.0	0	0
4	66.7	33.3	0	0
5 or more	93.6	6.4	0	0

While it is not possible to establish whether more trips make the teacher more enthusiastic about field trips or the most enthusiastic teachers are able to schedule more trips, it is clear that a large number of enthusiastic teachers are obtaining several field trips for their students.

Table 38 shows the field trips that teachers rated as most and least successful.

Table 38

EVALUATION OF FIELD TRIPS FROM TEACHERS' QUESTIONNAIRE

	Number of Teachers Rating Trips		
Trip	Most Successful	Least Successful	Percent Reporting Most Successful
Oakland Children's Zoo	35	--	100%
Dairy farms	10	--	100
Muir Woods	8	--	100
Point Reyes	2	--	100
Bay model in Sausalito	2	--	100
San Francisco Zoo	15	1	94
Fairyland (Oakland)	14	1	93
Tour of San Francisco	16	3	84
Chinatown	5	1	84
Bay cruise	14	3	82
Train ride	12	3	80
Moss Beach-Half Moon Bay	8	2	80
Japanese exhibition ship	4	1	80
Fire house	4	1	80
Randall Junior Museum	3	1	75
Brundage collection	3	1	75
Golden Gate Park	29	12	71
Transportation facilities tour	4	2	67
De Young Museum	3	3	50
Cow Palace	--	5	0
Libraries	--	4	0
Macy's Import Fair	--	2	0

Principal's Market Basket

The principals showed the same diversity of responses on field trips as on other items in the "market basket." Some schools did not spend any money on field trips under all three budgets while others wanted up to four trips per student per term. With the 1966-67 budget, the allocation to field trips was increased by an average of 12 percent. When the budget was decreased by 25 percent, there was an identical percentage reduction in expenditures for field trips. With a 25 percent increase in budget, the number of desired field trips increased by 70 percent.

STANFORD RESEARCH INSTITUTE

333 Ravenswood Avenue
Menlo Park, California 94025

Tel. (415) 326-6200
Cable: STANRES, MENLO PARK
TWX: 910-373-1246

Regional Offices and Laboratories

Southern California Laboratories
820 Mission Street
South Pasadena, California 91031
Tel. (213) 799-9501 • 682-3901

SRI-Washington
1000 Connecticut Avenue, N.W.
Washington, D.C. 20036
Tel. (202) 223-2660
Cable: STANRES, WASH.D.C.
TWX: 710-822-9310

SRI-New York
270 Park Avenue, Room 1770
New York, New York 10017
Tel. (212) 986-6494

SRI-Huntsville
Missile Defense Analysis Office
4810 Bradford Blvd., N.W.
Huntsville, Alabama 35805
Tel. (205) 837-3050
TWX: 510-579-2112

SRI-Detroit
303 W. Northland Towers
15565 Northland Drive
Southfield (Detroit), Michigan 48075
Tel. (313) 444-1185

SRI-Chicago
10 South Riverside Plaza
Chicago, Illinois 60606
Tel. (312) 236-6750

SRI-Europe
Pelikanstrasse 37
Zurich, Switzerland 8001
Tel. 27 73 27 (Day/Night) • 27 81 21 (Day)
Cable: STANRES, ZURICH

SRI-Scandinavia
Skeppargatan 26
Stockholm Ö, Sweden
Tel. 60 02 26; 60 03 96; 60 04 75

SRI-Japan
Nomura Securities Building
1-1 Nihonbashidori, Chuo-ku
Tokyo, Japan
Tel. Tokyo 271-7108
Cable: STANRESEARCH, TOKYO

Representatives

Canada
Cyril A. Ing
86 Overlea Boulevard
Toronto 17, Ontario, Canada
Tel. 425-5550

Italy
Lorenzo Franceschini
Via Macedonio Melloni 49
Milan, Italy
Tel. 72 32 46

05136

ED016732

Appendixes to:

EVALUATION OF THE COMPENSATORY EDUCATION PROGRAM OF THE SAN FRANCISCO UNIFIED SCHOOL DISTRICT, 1966-1967

Prepared for:

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
SAN FRANCISCO, CALIFORNIA

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA

STANFORD RESEARCH INSTITUTE

MENLO PARK, CALIFORNIA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

October 1967

Appendixes to:

EVALUATION OF THE COMPENSATORY EDUCATION PROGRAM OF THE SAN FRANCISCO UNIFIED SCHOOL DISTRICT, 1966-1967

Prepared for:

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
SAN FRANCISCO, CALIFORNIA

By: PHILIP H. SORENSON, THOMAS C. THOMAS, AND OCEA GOLDUPP

SRI Project I-6336

UD005136

CONTENTS

APPENDIXES

A ELEMENTARY PRINCIPAL "MARKET BASKET" A-1

B ELEMENTARY SCHOOL TEACHER QUESTIONNAIRE AND TABULATION OF RESULTS B-1

C JUNIOR AND SENIOR HIGH SCHOOL TEACHER QUESTIONNAIRE AND TABULATION OF RESULTS C-1

D SEPTEMBER-FEBRUARY AND SEPTEMBER-MAY CHANGES IN READING ACHIEVEMENT TEST SCORES FROM GRADE HIGH 4 THROUGH GRADE 12 . . . . D-1

E QUESTIONNAIRES TO PROJECT PERSONNEL E-1

Appendix A

ELEMENTARY PRINCIPAL "MARKET BASKET"

The ESEA "Market Basket" Game

Planning for the ESEA Compensatory Education Program calls for allocating limited funds in ways that will provide a best possible combination of useful and effective services. As seems always to be the case in education, demand exceeds resources and choices must be made. The need to choose presents a "market basket" problem for planners of the educational fare -- with a fixed budget, what is the best combination of services to "buy?"

> This market basket game has been devised to help in (1) evaluating the appropriateness of the services provided under ESEA Title I during 1966-67 and (2) planning a better combination of services for next year. In addition to providing useful information for evaluating this year's program and for planning its continuation next year, the "market basket" game may be entertaining for you to play.

The object of the game is to devise that combination of compensatory education services which, in your judgment as an elementary principal, is best suited to the needs of youngsters in your school.

> Three times through makes one game. In Round 1 -- the first time through -- your total budget is approximately equal to that of 1966-67. In Round 2, your budget is 25% less than before, thus forcing you to decide where and how much you'd cut. Round 3 is played with a budget that is 25% greater than for Round 1, thus permitting you to add new services or expand existing ones.

The combination you choose may be comprised of services that have been provided during 1966-67 or it may include other services that have not yet been part of the ESEA program in San Francisco. If you consider a service that is not part of the program at the present time, the following rules apply:

1. You must define the nature of the service in as specific terms as possible. A definition should specify what the service is intended to accomplish, how these objectives would be sought, and what evidence would indicate the degree to which the objectives were being realized.

2. Whatever compensatory service you contrive and define as specified above must be both technically and economically feasible. First, providing the service must be within the existing technology -- it must not assume the invention of a process, technique, procedure, or mechanism that isn't now somewhere

within the educator's kit-bag. Second, the cost of providing the service must be within the limits of available resources. If you include a service of your own invention -- something not priced and ready "on the shelf" -- you must assign it a value relative to some service in the existing selection.

Within the boundaries of technological and economic feasibility, then you're free to improvise and innovate -- nay, you're encouraged to improvise and innovate.

Several tables, including a sample response, are attached to help you decide what combination of services you would select for your ESEA market basket under the three differend budget levels. The "price list" has been developed from the actual ESEA Compensatory Education Program budget for 1966-67 and reflects the approximate relative cost of program elements for the elementary schools most involved in the program. Some simplifications have been introduced. For example, instead of using dollars to represent program costs (the "price list"), the cost of each service has been expressed in units against a reference of 1,000 units as the "cost" of a classroom teacher for full-time service for one school year.

Table 1 presents a simplified enrollment-by-grade distribution for the 24 schools in the target area. This profile is not exactly like any one of the 24 target area schools, of course. For purposes of the game, however, please use the reference data from Table 1 and imagine that it's your school. Naturally, your specification of desired services will be based on actual needs in your school as you perceive them. We ask you to "pretend" only with regard to the enrollment data.

Table 1

CHARACTERISTICS OF TARGET AREA SCHOOLS

Grades	Enrollment	Teachers
K	80	2
1	100	16
2	75	
3	80	
4	75	
5	70	
6	80	
Total	560	18

Average class sizes:

K = 20 (4 sessions)

1-6 = 30

Table 2 presents the "price list" and the present "market basket" of compensatory education program services for the 24 target area schools.

Tables 3 and 4 present two sample answer sheets. Table 3 illustrates how a principal might respond who preferred to re-allocate compensatory program services within the present budget to obtain more special services at the expense of maintaining pre-ESEA class sizes. Table 4 shows how that principal might juggle class sizes by grade level within this pre-ESEA complement of classroom teachers. How you elect to distribute classes by size is as important a part of the "market basket" game as your selection of special ESEA services. The example in Table 4 is intentionally unusual as compared to current practice within the District. For purposes of the "market basket" game, District guidelines on class size may be (but need not be) ignored. Play the game as though any class size distribution is possible so long as you consider it defensible.

Blank answer sheets are attached for three rounds -- specifying the "market basket" (1) with the present budget, (2) with a 25% reduction in budget, and (3) with a 25% increase in budget. Please note that each problem calls for the completion of two answer sheets -- one to show the desired allocation of services and the other to show the desired class size distribution.

Table 2

ESEA SERVICES "PRICE LIST" FOR A TARGET SCHOOL

Type of Resource or Service	Cost	1966-67 Purchases
Teacher to reduce class size	1,000 units	1,000 units
Compensatory Teacher (5 classes of 12 students each per day)	1,000 units	1,000 units
Community Teacher	1,000 units	330 units (1/3 time assignment)
Librarian	1,000 units	500 units (1/2 time assignment)
Reading clinic	45 units per student served	90 units (2 students sent)
Tutorial center	165 units for 50 sessions (1 hr./session)	165 units
Field trips	65 units/trip for all students except Kinderg'n	130 units (ave.2 trips/student)
Resource Teacher	1,000 units	40 units (1/25 of resource teacher)
Paid Aides	5 units (one hour per week for a year)	200 units (40 hrs. per week for a year)
TOTAL 1966-67 "MARKET BASKET"		3,555 units

---

NOTES

1. The "price" of all services is referenced to the cost of an experienced elementary school teacher. The cost of the teacher is set at 1,000 units to simplify computations.

2. For Game No. 1, use 3,555 units as representing the present budget.
For Game No. 2, use 2,665 units (25% decrease in budget).
For Game No. 3, use 4,445 units (25% increase in budget).

Table 3

SAMPLE "MARKET BASKET"

ANSWER SHEET

Round No. 1 School Name: Ralph Waldo

Budget: 3,555 Units

Type of Resource or Service	Cost	Desired Purchase
Teacher to reduce class size	1,000 units	—
Compensatory Teacher	1,000 units	1,000
Community Teacher	1,000 units	500
Social Worker	1,000 units	—
Librarian	1,000 units	500
Speech Therapist	1,000 units	—
Reading clinic	45 units per student served	450
Tutorial center	165 units for 50 1-hr sessions	330
Field trips	65 units per trip (all students)	260
Resource Teacher	1,000 units	100
Paid Aides	5 units (1 hr/wk/aide for year)	415
Other Services, Supplies, Materials, Equipment, etc. (DESCRIBE)*/	Charge at Cost of Personnel	

TOTAL DESIRED PURCHASES . . . . 3,555 units

*/ Use reverse side if necessary for descriptions of other services

Table 4

SAMPLE CLASS DISTRIBUTION

ANSWER SHEET

Round No. 1

School Name: Ralph Waldo

Budget 3,555 Units

Class Size Distribution

Class No.	Level		Class Size
1.	K a.m.		20
2.	K p.m		20
3.	K a.m.		20
4.	K p.m.		20
5.	1		20
6.	1		28
7.	1		36
8.	1-2	(16, 7)	23
9.	2		31
10.	2-3	(37, 2)	39
11.	3		25
12.	3		33
13.	3-4		21
14.	4		29
15.	4		37
16.	4-5	(8, 16)	24
17.	5		32
18.	5-6	(22, 18)	40
19.	6		27
20.	6		35
21.			
22.			
23.			
24.			

TOTAL NUMBER STUDENTS 560

Reference Data

Grades	Enrollment	Teachers
K	80	2
1	100	
2	75	
3	80	
4	75	16
5	70	
6	80	
Total	560	18*

Additional Teachers to reduce class size: 0

Total No. of Teachers: 18

* Normal District allocation

Please describe briefly why you selected this distribution: Varied size groupings suited to pupil characteristics and teacher skills. Anticipate some team instruction and use of aides in largest classes.

ANSWER SHEET

Round No. 1

School Name: __________

Budget: 3,555 Units

Type of Resource or Service	Cost	Desired Purchase
Teacher to reduce class size	1,000 units	
Compensatory Teacher	1,000 units	
Community Teacher	1,000 units	
Social Worker	1,000 units	
Librarian	1,000 units	
Speech Therapist	1,000 units	
Reading clinic	45 units per student served	
Tutorial center	165 units for 50 1-hr. sessions	
Field trips	65 units per trip (all students)	
Resource Teacher	1,000 units	
Paid Aides	5 units (1 hr/wk/aide for year)	
Other Services, Supplies, Materials, Equipment, etc. (DESCRIBE)*/	Charge at Cost of Personnel	

TOTAL DESIRED PURCHASES . . . . ______ units

*/ Use reverse side if necessary for descriptions of other services

ANSWER SHEET

Round No. 1 **School Name:** ________________

Budget 3555 **Units**

Class Size Distribution

Class No.	Level	Class Size
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

TOTAL NUMBER STUDENTS . . . . ______

Reference Data

Grades	Enrollment	Teachers
K	80	2
1	100	16
2	75	
3	80	
4	75	
5	70	
6	80	
Total	560	18*

Additional Teachers to reduce class size: ______

Total No. of Teachers: ______

* Normal District allocation

Please describe briefly why you selected this distribution: ________________

____

____

____

ANSWER SHEET

Round No. 2 School Name: ____________

Budget: 2,665 Units

Type of Resource or Service	Cost	Desired Purchase
Teacher to reduce class size	1,000 units	____
Compensatory Teacher	1,000 units	____
Community Teacher	1,000 units	____
Social Worker	1,000 units	____
Librarian	1,000 units	____
Speech Therapist	1,000 units	____
Reading clinic	45 units per student served	____
Tutorial center	165 units for 50 1-hr. sessions	____
Field trips	65 units per trip (all students)	____
Resource Teacher	1,000 units	____
Paid Aides	5 units (1 hr/wk/aide for year)	____
Other Services, Supplies, Materials, Equipment, etc. (DESCRIBE)*/	Charge at Cost of Personnel	
____	____	____
____	____	____
____	____	____
____	____	____

TOTAL DESIRED PURCHASES . . . . ____ units

*/ Use reverse side if necessary for descriptions of other services

ANSWER SHEET

Round No. 2

School Name: ________________

Budget 2,665 **Units**

Class Size Distribution

Class No.	Level	Class Size
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

TOTAL NUMBER STUDENTS . . . . _____

Reference Data

Grades	Enrollment	Teachers
K	80	2
1	100	16
2	75	
3	80	
4	75	
5	70	
6	80	
Total	560	18*

Additional Teachers to reduce class size: _____

Total No. of Teachers: _____

* Normal District allocation

Please describe briefly why you selected this distribution: ________________

ANSWER SHEET

Round No. 3

School Name: ____________________

Budget: 4,445 Units

Type of Resource or Service	Cost	Desired Purchase
Teacher to reduce class size	1,000 units	
Compensatory Teacher	1,000 units	
Community Teacher	1,000 units	
Social Worker	1,000 units	
Librarian	1,000 units	
Speech Therapist	1,000 units	
Reading clinic	45 units per student served	
Tutorial center	165 units for 50 1-hr. sessions	
Field trips	65 units per trip (all students)	
Resource Teacher	1,000 units	
Paid Aides	5 units (1 hr/wk/aide for year)	
Other Services, Supplies, Materials, Equipment, etc. (DESCRIBE)*/	Charge at Cost of Personnel	

TOTAL DESIRED PURCHASES . . . . ________ units

*/ Use reverse side if necessary for descriptions of other services

ANSWER SHEET

Round No. 3 School Name: ____________

Budget 4,445 Units

Class Size Distribution

Class No.	Level	Class Size
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		
21.		
22.		
23.		
24.		

TOTAL NUMBER STUDENTS . . . . ______

Reference Data

Grades	Enrollment	Teachers
K	80	2
1	100	16
2	75	
3	80	
4	75	
5	70	
6	80	
Total	560	18*

Additional Teachers to reduce class size: ______

Total No. of Teachers: ______

* Normal District allocation

Please describe briefly why you selected this distribution: ______

SATURATION SERVICE SCHOOLS

The budget for saturation schools was higher than the budget for target schools. Saturation schools were each allotted a full-time speech therapist and a full-time social worker.

The saturation schools also differed in class size distribution; they had fewer total students, and grades extended only through the fourth grade. The following are the sample "price list" and class size distribution used for saturation schools in the market basket game.

Table 2

ESEA SERVICES "PRICE LIST" FOR A SATURATION SCHOOL

Type of Resource or Service	Cost	1966-67 Purchases
Teacher to reduce class size	1,000 units	1,000 units
Compensatory Teacher (5 classes of 12 students each per day)	1,000 units	1,000 units
Community Teacher	1,000 units	330 units (1/3 time assignment)
Social Worker	1,000 units	500 units (1/2 time assignment)
Librarian	1,000 units	500 units (1/2 time assignment)
Speech Therapist	1,000 units	1,000 units
Reading clinic	45 units per student served	90 units (2 students sent)
Tutorial center	165 units for 50 sessions (1 hr./session)	330 units (50 sessions of 2 hrs. each)
Field trips	65 units/trip for all students except Kinderg'n	130 units (ave. 2 trips/student
Resource Teacher	1,000 units	40 units (1/25 of resource teacher)
Paid Aides	5 units (one hour per week for a year)	200 units (40 hrs. per week for a year)

TOTAL 1966-67 "MARKET BASKET" . . . . 5,220 units

NOTES

1. The "price" of all services is referenced to the cost of an experienced elementary school teacher. The cost of the teacher is set at 1,000 units to simplify computation.
2. For Game No. 1, use 5,220 units as representing the present budget. For Game No. 2, use 3,915 units (25% decrease in budget). For Game No. 3, use 6,525 units (25% increase in budget).

Table 4

SAMPLE CLASS DISTRIBUTION

ANSWER SHEET

Round No. 1

Budget: 5,220 Units

School Name: Dudley Swett

	Class Size Distribution	
Class No.	**Level**	**Class Size**
1.	K a.m.	20
2.	K p.m.	20
3.	K a.m.	20
4.	K p.m.	20
5.	1	18
6.	1	25
7.	1	27
8.	1	32
9.	1-2 (8,12)	20
10.	2	28
11.	2	34
12.	2-3 (6,24)	30
13.	3	21
14.	3	35
15.	4	23
16.	4	37
17.		
18.		
19.		
20.		
21.		
22.		

TOTAL NUMBER STUDENTS . . . 410

	Reference Data	
Grades	**Enrollment**	**Teachers**
K	80	2
1	110	12
2	80	
3	80	
4	60	
Total	410	14*

Additional Teachers to reduce class size: 0

Total No. of Teachers: 14

* Normal District allocation

Please describe briefly why you selected this distribution: Varied size groupings suited to pupil characteristics and teacher skills. Anticipate some team instruction and use of aides in largest classes.

Table A-1

AVERAGE UNITS SPENT ON PROGRAM ELEMENTS FOR EACH ROUND IN MARKET BASKET GAME

	Teacher To Reduce Class Size	Compensatory Teacher	Community Teacher	Social Worker	Librarian	Speech Therapist	Reading Clinic	Tutorial Center	Field Trips	Resource Teacher	Paid Aides	Other	Total Expenditure
Saturation Service Schools													
1966-67 budget index	1,000	1,000	330	500	500	1,000	90	330	130	40	200		5,120* (5,220)
Purchases against 1966-67 budget index													
Average purchase	1,750	1,000	182	300	258	675	56	124	214	50	361	250	5,220
Percent difference from 1966-67	+75.0%	0.0%	-44.8%	-40.0%	-48.4%	-32.5%	-37.8%	-62.4%	+64.6%	+25.0%	+80.5%	n.a.	(5,220)
25% budget decrease													
Average purchase	1,125	750	182	232	182	525	56	25	181	50	392	225	3,925
Percent difference from 1966-67	+12.5%	-25.0%	-44.8%	-53.6%	-63.6%	-47.5%	-37.8%	-92.4%	+39.2%	+25.0%	+96.0%	n.a.	(3,915)
25% budget increase													
Average purchase	2,000	1,125	382	425	400	875	56	124	295	200	391	375	6,648
Percent difference from 1966-67	+100.0%	+12.5%	+15.8%	-15.0%	-20.0%	-12.5%	-37.8%	-62.4%	+126.9%	+400.0%	+95.5%	n.a.	(6,525)
Target Schools													
1966-67 budget index	1,000	1,000	330	—	500	—	90	165	130	40	200		3,455* (3,555)
Purchases against 1966-67 budget index													
Average purchase	1,174	804	416	13	401	63	61	86	186	46	206	134	3,550
Percent difference from 1966-67	+17.4%	-19.6%	+26.1%	n.a.	-19.8%	n.a.	-32.2%	-47.9%	+43.1%	+15.0%	+3.0%	n.a.	(3,555)
25% budget decrease													
Average purchase	935	700	274	33	228	40	51	39	97	27	141	96	2,661
Percent difference from 1966-67	-6.5%	-30.0%	-17.0%	n.a.	-54%	n.a.	-43.3%	-76.3%	-25.4%	-32.5%	-29.5%	n.a.	(2,665)
25% budget increase													
Average purchase	1,652	822	496	35	468	65	113	70	220	71	234	181	4,420
Percent difference from 1966-67	+65.2%	-17.8%	+50.3%	n.a.	-6.4%	n.a.	+25.6%	-57.6%	+59.2%	+77.5%	+17.0%	n.a.	(4,445)

---

* As the result of an error in reproducing the original instrument, total budget allowances per school were greater than the sum of individual item costs from the "price list." Principals made their purchases against the total budget allowance shown in parentheses.

Table A-2

SUMMARY OF PERCENT SPEND ON EACH PROGRAM ELEMENT AGAINST TOTAL AMOUNT BUDGETED FOR EACH ROUND IN MARKET BASKET GAME

	Teacher T[illegible] Reduce Class Size	Compensatory Teacher	Community Teacher	Social Worker	Librarian	Speech Therapist	Reading Clinic	Tutorial Center	Field Trips	Resource Teacher	Paid Aides	Other	Total
Saturation Service Schools													
Percent now spent against existing budget	19.5%	19.5%	6.4%	9.8%	9.8%	19.5%	1.8%	6.4%	2.5%	0.8%	3.9%	0.0%	100.0%
Percent purchased in "game" against existing budget (Round 1)	33.5	19.2	3.5	5.7	4.9	12.9	1.1	2.4	4.1	1.0	6.9	4.8	100.0
Percent purchased against 25% reduction (Round 2)	28.6	19.1	4.6	5.9	4.6	13.4	1.4	0.6	4.6	1.3	10.0	5.7	100.0
Percent purchased against 25% increase (Round 3)	30.1	16.9	5.8	6.4	6.0	13.2	0.8	1.9	4.4	3.0	5.9	5.6	100.0
Target Schools													
Percent now spent against existing budget	28.9	28.9	9.6	0.0	14.5	0.0	2.6	4.8	3.8	1.2	5.8	0.0	100.0
Percent purchased in "game" against existing budget (Round 1)	33.1	22.7	11.7	0.4	11.3	1.8	1.7	2.4	4.1	1.3	5.8	3.8	100.0
Percent purchased against 25% reduction (Round 2)	35.1	26.3	10.3	1.2	8.6	1.5	1.9	1.5	3.7	1.0	5.3	3.6	100.0
Percent purchased against 25% increase (Round 3)	37.3	18.6	11.2	0.8	10.6	1.5	2.6	1.6	5.0	1.6	5.3	4.1	100.0

Note: Totals may not add to 100% due to rounding.

Table A-3

PRINCIPAL'S MARKET BASKET GAME
(Round 1 - Purchases Based on 1966-67 Budget)

	Purchases											
School	Teacher To Reduce Class Size	Compensatory Teacher	Community Teacher	Social Worker	Librarian	Speech Therapist	Reading Clinic	Tutorial Center	Field Trips	Resource Teacher	Paid Aides	Other
Saturation Service:												
1966-67 actual purchases*	1,000	1,000	330	500	500	1,000	90	330	130	40	200	
001	1,000	1,000	330	500	330	1,000		165	260	200	435	
002	1,000	1,000	200	500	500	500	225	330	265		700	
004	4,000					200					20	1,000[e]
005	1,000	2,000[a]	200	200	200	1,000			330[b]		290	
Target:												
1966-67 actual purchases*	1,000	1,000	300	--	500	--	90	165	130	40	200	
007	1,000		500		500		450	330	260	100	415	
008	1,000	1,000	500		500				130		425	
009	1,000	1,000	330		330	330			260	80	200	
010		1,000	250		750		225	330	260	300	440	
011		1,000	500		330	330	225		325	80	375	390[f]
012		1,000	1,000		1,000				155		200	200[g]
013	3,000	500									55	
014	1,000	750	330		350				200	100	250	550[h]
003		1,000	500		500	500		660	260		135	
015	3,000										475	80[g]
018	1,000	1,000	330		500				195		200	330[i]
019	1,000	1,000	500		500			330			225	
021	3,000										15	540[j]
023	1,000	750	330		350				200	100	250	550[h]
024	1,000	1,000	500		500				195	160	200	
026	1,000	1,000	660		500	195					200	
027	1,000	1,000	1,000		355						200	
033	1,000	1,000	1,000		500				50		5	
037	1,000	1,000	330	200	500		45		130	40	150	160[k]
038	1,000	1,000	1,000					330	130		95	
039	2,000	500			1,000							
041	2,000	1,000		100		100			355			
043	1,000	1,000			250[c]		450		260	100[d]	220	275[h]

Note: As a result of an error in reproducing the original instrument, total budget allowances per school were greater than the total cost of individual items from the "price list" (3,555 units versus 3,455 for target schools and 5,220 versus 5,120 for saturation schools). Principals made their purchases against the total budget allowance.

* These are index numbers that show the relative program costs in 1966-67.
a Second compensatory teacher with fluency in Spanish.
b Field trips to include Kindergarten.
c For books only—no classes.
d Visual aids chiefly.
e Special teacher to work with children who have problems in regular class--completely flexible.
f Supplies, admission fees to special events--special, such as lunch on field trips for class.
g Public health nurse one day a week.
h Supplies, materials, reading cards, and work books.
i Basic school supplies--new class.
j Special teacher to work with children who have problems.
k Additional audio visual materials.
l Work books--paper for machines, etc.

Table A-4

PRINCIPAL'S MARKET BASKET GAME
(Round 2 - Based on 25% Under 1966-67 Budget)

	Purchases											
School	Teacher To Reduce Class Size	Compensatory Teacher	Community Teacher	Social Worker	Librarian	Speech Therapist	Reading Clinic	Tutorial Center	Field Trips	Resource Teacher	Paid Aides	Other
Saturation Service:												
1966-67 actual purchases*	1,000	1,000	330	500	500	1,000	90	330	130	40	200	
001		1,000	330	330	330	1,000			130	200	595	
002	500	1,000	200	500	200	500	225	100	265		475	
004	3,000										15	900[a]
005	1,000	1,000	200	100	200	600			330		485	
Target:												
1966-67 actual purchases*	1,000	1,000	330	—	500	--	90	165	130	40	200	
007	1,000		500	500				330			400	
008	1,000	1,000	200		400						65	
009	1,000	1,000	250	250					130			
010		1,000	250		500		225	165	260	100	165	
011		1,000	500		225	330			260	80	225	45[b]
012	1,000	1,000						65			400	200[c]
013	2,000	600									65	
003		1,000	500		500	500			165			
014	1,000	500	200		200				100	100	105	460[d]
015	2,500										165	
018		1,000	500		500				130		535	
019	1,000	500	500		500						165	
021	2,000										15	650[a]
023	1,000	500	200		200				100	100	105	460[d]
024		1,000	500		500				165	250	250	
026	1,000	1,000	330		235						100	
027	1,000	1,000	665									
033	1,000	500	700		400				50		15	
037	1,000	1,000			330				65		150	120[e]
038	1,000	500	500					330	130		205	
039	2,000				500		45					
041	1,000	1,000				100			565			
043		1,000			250		900		130		110	275[d]

---

* These are index numbers that show the relative program costs in 1966-67.

a Special teacher to work with children who have problems in regular classes--completely flexible.

b Supplies as needed.

c Public health nurse.

d Supplies, materials--reading cards, work books.

e Additional audio visual material, filmstrips, etc.

Table A-5

PRINCIPAL'S MARKET BASKET GAME
(Round 3 - Based on 25% Increase in 1966-67 Bduget)

	Purchases											
School	Teacher To Reduce Class Size	Compensatory Teacher	Community Teacher	Social Worker	Librarian	Speech Therapist	Reading Clinic	Tutorial Center	Field Trips	Resource Teacher	Paid Aides	Other
Saturation Service:												
1966-67 actual purchases*	1,000	1,000	330	500	500	1,000	90	330	130	40	200	
001	1,000	1,500	330	500	500	1,000		165	390	500	140	500[c]
002	1,000	1,000	1,000	1,000	500	1,000	225	330	265		700	
004	5,000					500					25	1,000[d]
005	1,000	2,000[a]	200	200	600	1,000			525[b]	300	700	
Target:												
1966-67 actual purchases*	1,000	1,000	330	--	500	--	90	165	130	40	200	
007	1,000		500		500		900	330	260	100	830	
008	2,000	1,000	500		500				260		185	
009	2,000	1,000	330		330	330			260		200	
010	1,000	1,000	500		500		360	330	260	100	395	
011	1,000	1,000	500		330	330	180		325	80	375	325[e]
012	1,000	1,000	1,000		1,000				145		100	200[f]
013	4,000	400									45	
003		2,000	500		500	500		330	260	355		
014	1,000	750	500	100	500		90		400	150	405	550[g]
015	3,000			500	100			165	195		485	
018	1,000	1,000	500		500		450	165	130		200	500[h]
019	1,000	1,000	500		500			125		100	225	1,000[i]
021	4,000										15	430[d]
023	1,000	750	500	100	500		90		400	150	405	550[g]
024	2,000	1,000	500		500				195		100	
026	1,000	1,000	1,000		1,000	245					200	
027	1,000	1,000	1,000		1,000						445	
033	1,000	1,000	1,000		1,000				200	200	45	
037	2,000	1,000	330		500		45		130	40	150	250[j]
038	3,000		1,000					165	130		150	
039	2,000	1,000	500		500		45					
041	2,000	1,000		100		100			1,245			
043	1,000	1,000	250		500		450		260	200	435	350[g]

---

* These are index numbers that show the relative program costs in 1966-67.

[a] A second compensatory teacher with fluency in Spanish.

[b] Field trips to include Kindergarten.

[c] Remedial arithmetic teacher half-time (500).

[d] Special teacher to work with children who have problems in regular class—flexible.

[e] Supplies and equipment, admission fees to special events, special--such as lunch for class on field trips.

[f] Public health nurse.

[g] Supplies and materials, reading cards, work books.

[h] Some equipment to further new class assignment; basic school supplies.

[i] Guidance worker on the premises.

[j] Additional audio visual aids and materials.

Appendix B

ELEMENTARY SCHOOL TEACHER QUESTIONNAIRE AND TABULATION OF RESULTS

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
OFFICE OF COMPENSATORY EDUCATION
ROOM 213-A, 135 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102

June 6, 1967

To: All Classroom Teachers, ESEA Target Schools

From: Miss Tennessee Kent, Assistant Superintendent, Elementary Schools
Mr. Harold L. Weeks, Director, Research
Mr. Victor Rossi, Supervisor, Compensatory Education

This month marks the end of the first full year of the ESEA Title I Compensatory Education Program. It should now be possible to view the strengths and weaknesses of the program with a perspective that was not possible a year ago.

Attached is a questionnaire prepared for all classroom teachers in the ESEA target schools. Although the questionnaire may appear as complex as the program itself, your opinions are a vital part of the evaluation and your cooperation would be deeply appreciated.

You may be sure that all comments and responses will be treated as confidential. No one is asked to sign their name to the questionnaire, although you are free to do so if you wish. Questionnaires should be sealed in the attached envelope and returned to your school secretary no later than June 16, 1967. When reassembled, all questionnaires will be tabulated by Stanford Research Institute. The report of replies will be completely anonymous.

If the ESEA Compensatory Program is to be improved, it must have the benefit of your criticism and suggestions. Please be candid and constructive. Your help is essential.

ELEMENTARY SCHOOLS
May/June 1967

Teacher Opinion Survey
# of the
ESEA Program

Please answer the appropriate item:

a. Name of your school ____

b. Grade level

8-1___ Kindergarten
-2___ 1
-3___ 2
-4___ 3
-5___ 4
-6___ 5
-7___ 6

c. Years of experience in the San Francisco Unified School District

9-1___ 1 or less
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6
-7___ 7-8
-8___ 9-10
-9___ More than 10 (SPECIFY NUMBER):

d. Years in this school

10-1___ 1 or less
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6
-7___ 7-8
-8___ 9-10
-9___ More than 10 (SPECIFY NUMBER): _______

e. Number of aides and volunteers assisting you, if any:

11-
12- ___ aides

13-
14- ___ volunteers

SECTION A

1. On the average how many children do you have in your class this year (1966-67) compared to last year (1965-66)?

15-
16- ____ Number in class this year (1966-67)

17-
18- ____ Number in class last year (1965-66)

19-1 ____ Was not teaching at elementary level in 1965-66
20-
21-
22-

2. How does teaching this year (1966-67) compare to last (1965-66)?

23-1 ___ was not teaching at elementary level last year (1965-66) so cannot answer question
-2 ___ this year seems very much easier
-3 ___ this year seems somewhat easier
-4 ___ teaching this year seems neither easier nor more difficult
-5 ___ this year seems somewhat more difficult
-6 ___ this year seems very much more difficult

3. If you feel that teaching this year is either noticeably easier or more difficult than last, please describe briefly why this is so:

24- ____

25- ____

____

4. How many children in your classroom regularly go to a Compensatory class?

26-0 ___ none
-1 ___ 1
-2 ___ 2
-3 ___ 3
-4 ___ 4
-5 ___ 5
-6 ___ 6-8
-7 ___ 9-11
-8 ___ 12-14
-9 ___ 15 or more (SPECIFY NUMBER): ____

5. If one or more of your children regularly leaves your classroom to attend a compensatory class, have you noticed any changes in their:

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
27-	general mood				
28-	responsiveness in your class				
29-	attentiveness in your class				
30-	orderliness				
31-	participation in class discussions				
32-	willingness to share information				
33-	readiness to ask for help				
34-	general level of academic achievement				

6. Are you sure the compensatory class was the major cause of those characteristics that improved?

35-1___ yes
-2___ no

7. How many children in your classroom have received some services from the Community Teacher assigned to your school?

36-0___ none
-1___ 1
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6-8
-7___ 9-11
-8___ 12 or more (SPECIFY NUMBER): ______
-9___ don't know

8. If one or more of the children from your class have received services from the Community Teacher, have you noticed any changes in the following:

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
37-	their attendance has improved	___	___	___	___
38-	they seem more interested in school	___	___	___	___
39-	they are more attentive in class	___	___	___	___
40-	they are more responsive during class	___	___	___	___
41-	they are better behaved in the classroom	___	___	___	___
42-	they seem to be doing better academic work than before	___	___	___	___
43-	they seem more relaxed and happy	___	___	___	___
44-	they are more likely to seek help from me	___	___	___	___

9. Are you sure the Community Teacher was the major cause of those characteristics that improved?

45-1___ yes
-2___ no

10. Have the services of the Community Teacher been available when needed?

46-1___ always or almost always available
-2___ usually available
-3___ sometimes available, sometimes not
-4___ seldom available
-5___ never or almost never available

11. Have the following services of the librarian in your school been helpful to you?

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
47-	setting up the school library	___	___	___	___
48-	locating materials	___	___	___	___
49-	instructing children in library skills	___	___	___	___
50-	storytelling	___	___	___	___
51-	other services: ______________________________	___	___	___	___
	______________________________	___	___	___	___

12. In the future, what services would you like to receive from the librarian?

52-____________________________

____

13. How much service have you received from:

	A great deal -1	Some -2	Not at all -3	I don't know -4	
53-					the audio-visual resource teacher
54-					the compensatory resource teacher
55-					the mathematics resource teacher

14. Have you found the services of the resource teachers available when needed?

	A great deal -1	Some -2	Not at all -3	I don't know -4	
56-					the audio-visual resource teacher
57-					the compensatory resource teacher
58-					the mathematics resource teacher

15. In the future what services would you like to receive from the:

59-
60- audio-visual resource teacher ________________________

____

61- compensatory resource teacher ________________________

____

mathematics resource teacher ________________________

____

____

16. Generally speaking, have demonstrations, visitations, meetings, and other in-service training programs been helpful to you this year?

62-1___ very helpful
-2___ somewhat helpful
-3___ not particularly helpful
-4___ was not involved in any in-service training activity

17. How helpful have the following in-service training activities been to you?

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
63-	demonstrations				
64-	visitations				
65-	small group meetings				
66-	other in-service activities: ______________________				
	______________________				

18. If in-service training has aided you, could you describe a specific case in which you used what you learned in your in-service training.

____

____

____

____

19. In the future what other type of in-service training would you like to receive?

67- ____

____

	-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
68 -				
70-				

20. If you have had teacher aides how has this added service benefited your teaching situation?

21. How many children from your classroom are receiving services from the Reading Clinic?

69-1___ none
-2___ 1
-3___ 2
-4___ 3 or more (SPECIFY NUMBER): ______

22. How much improvement have you noticed in the reading skills of your children attending the Reading Clinic?

23. Are you sure the Reading Clinic was the major cause of improvement in reading skills?

71-1___ yes
-2___ no

24. How many field trips has your class taken this school year (1966-67)?

72-1___ none
-2___ 1
-3___ 2
-4___ 3
-5___ 4
-6___ 5 or more (SPECIFY NUMBER): ______

25. Considering all the field trips your class has taken this year, how successful would you judge field trips to have been?

73-1___ very successful
-2___ somewhat successful
-3___ generally disappointing

Which field trip was most successful of all?

74- ____

Which field trip was least successful of all?

75- ____

26. How many of your children regularly attend the after-school study center?

78-0___ none
-1___ 1
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6
-7___ 7
-8___ 8 or more (SPECIFY NUMBER): ______

80-1

27. If one or more of the children from your class have regularly attended the after-school study center, have you noticed any changes in the following:

	A great deal -1	Some -2	Not at all -3	I don't know -4	
8-					their attendance has improved
9-					they seem more interested in school
10-					they are more attentive in class
11-					they are more responsive during class
12-					they are better behaved in the classroom
13-					they seem to be enjoying school more than before
14-					they seem to be doing better academic work than before
15-					they seem more relaxed and happy
16-					they are more likely to seek help from me

28. Are you sure the after-school study center was the major cause of those characteristics that improved?

17-1___ yes
-2___ no

29. To what extent have the following instructional materials and equipment been useful to you in your teaching this year?

		A great deal -1	Some -2	Not at all -3	I don't know -4
18-	filmstrips				
19-	library books				
20-	study prints				
21-	films				
22-	records				
23-	multiple copies of trade books				
24-	tapes				
25-	realia (exhibits and art objects)				
26-	listening center				
27-	tape recorder				
28-	filmstrip projector				
29-	16mm projector				
30-	primary typewriter				
31-	overhead projector				
32-	individual previewers				
33-	heat copier (Thermo-Fax, Ald-o-Fax, or Standard)				
34-	cameras				
	Other instructional materials or equipment:				
35-	______________________________				
36-	______________________________				
37-	______________________________				
38-	30. To what extent has the multi-media library (film strips, records, study prints, etc.) affected your classroom teaching?				

31. Considering the total program of your school this year (1966-67), how does it compare in quality to last (1965-66)?

39-1___ was not teaching in this school last year so cannot answer question
-2___ this year seems very much better
-3___ this year seems somewhat better
-4___ this year seems neither better nor worse than last
-5___ this year seems somewhat worse
-6___ this year seems very much worse

32. From your impressions of the ESEA program as it has operated this year, how do you think the program should be planned for the future?

40-1___ should be expanded in all or nearly all of its parts
-2___ should be expanded in some parts while other parts remain about as they are now
-3___ should remain about as it has been in 1966-67
-4___ should be curtailed in some parts while other parts remain about as they are now
-5___ should be curtailed in all or nearly all of its parts
-6___ should be discontinued completely
-7___ no opinion

33. How many children in your classroom have received some services from the Social Worker assigned to your school?

41-0___ none
-1___ 1
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6-8
-7___ 9-11
-8___ 12 or more (SPECIFY NUMBER): ______
-9___ don't know

34. If one or more of the children from your class have received services from the Social Worker, have you noticed any changes in the following:

	-1 A great deal	-2 Some	-3 Not at all	-4 I don't know	
42-	___	___	___	___	their attendance has improved
43-	___	___	___	___	they seem more interested in school
44-	___	___	___	___	they are more attentive in class
45-	___	___	___	___	they are more responsive during class
46-	___	___	___	___	they are better behaved in the classroom
47-	___	___	___	___	they seem to be enjoying school more than before
48-	___	___	___	___	they seem to be doing better academic work than before
49-	___	___	___	___	they seem more relaxed and happy
50-	___	___	___	___	they are more likely to seek help from me

35. Are you sure the Social Worker was the major cause of those characteristics that improved?

51-1___ yes
-2___ no

36. How many children from your classroom are receiving services from the Speech Therapist?

52-1___ none
-2___ 1
-3___ 2
-4___ 3
-5___ 4
-6___ 5 or more (SPECIFY NUMBER): _____

	-1 A great deal	-2 Some	-3 Not at all	-4 I don't know	
53-	___	___	___	___	37. How much improvement have you been able to detect in the children from your class who are receiving services of the Speech Therapist?

SECTION B

INSTRUCTIONS

Many factors make teaching both difficult and demanding and also influence the way a teacher's time is spent. Some of the things that teachers often mention are listed below. Opposite each factor, check the space that indicates (1) how much of a problem each has been for you during the 1966-67 school year, and (2) how much time you've needed to deal with them.

Some of the considerations listed may be more prominent at certain times of the school year than at other times. When you think of your response to each question, try to average out these variations so that your answer reflects the whole school year 1966-67.

	How much of a problem is each factor for you?	About what portion of your time is needed to deal with each problem?
	Very important problem No problem at all	Virtually no time Practically all my time
1. Figuring out how to provide for individual differences among pupils	54- :___:___:___:___:___: 1 2 3 4 5	55- :___:___:___:___:___: 1 2 3 4 5
2. Maintaining discipline and control within the classroom	56- :___:___:___:___:___: 1 2 3 4 5	57- :___:___:___:___:___: 1 2 3 4 5
3. Motivating children; getting them interested and participating	58- :___:___:___:___:___: 1 2 3 4 5	59- :___:___:___:___:___: 1 2 3 4 5
4. Finding content appropriate to the children's needs	60- :___:___:___:___:___: 1 2 3 4 5	61- :___:___:___:___:___: 1 2 3 4 5
5. Finding time to do all the things other than teaching that have to be done	62- :___:___:___:___:___: 1 2 3 4 5	63- :___:___:___:___:___: 1 2 3 4 5

	How much of a problem is each factor for you?		About what portion of your time is needed to deal with each problem?	
	Very important problem	No problem at all	Virtually no time	Practically all my time
6. Evaluating pupil performance and assigning grades	64- :___:___:___:___:___: 1 2 3 4 5		65- :___:___:___:___:___: 1 2 3 4 5	
7. Coping with interruptions of classroom routine	66- :___:___:___:___:___: 1 2 3 4 5		67- :___:___:___:___:___: 1 2 3 4 5	
8. Getting supplies, instructional materials, or special services when I need them	68- :___:___:___:___:___: 1 2 3 4 5		69- :___:___:___:___:___: 1 2 3 4 5	

J

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
* a. Name of your school	*
b. Grade level	
- Kindergarten	10.7
- 1	23.8
- 2	16.5
- 3	14.6
- 4	12.1
- 5	10.4
- 6	11.2
- No Answer	0.7
c. Years of experience in the San Francisco Unified School District	
- 1 or less	16.3
- 2	10.4
- 3	9.7
- 4	8.7
- 5	5.8
- 6	5.8
- 7-8	8.7
- 9-10	7.8
- More than 10	26.5
- No Answer	0.2
d. Years in this school	
- 1 or less	24.8
- 2	13.8
- 3	10.2
- 4	8.7
- 5	5.8
- 6	5.3
- 7-8	8.5
- 9-10	6.3
- More than 10	16.3
- No Answer	0.2

*Not coded

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
e. Number of aides and volunteers assisting you, if any	
- aides (1)	27.2
(2)	14.3
(3)	0.7
(4)	0.5
none	57.3
- volunteers (1)	10.0
(2)	1.2
(3)	0.0
(4)	0.2
none	88.6
1. On the average how many children do you have in your class this year (1966-67) compared to last year (1965-66)?	**
2. How does teaching this year (1966-67) compare to last year (1965-66)?	
- was not teaching at elementary level last year (1965-66) so cannot answer question	16.3
- this year seems very much easier	10.4
- this year seems somewhat easier	16.5
- teaching this year seems neither easier nor more difficult	30.1
- this year seems somewhat more difficult	16.0
- this year seems very much more difficult	10.0
- no answer	0.7
3. If you feel that teaching this year is either noticeably easier or more difficult than last, please describe briefly why this is so.	*
4. How many children in your classroom regularly go to a Compensatory class.	
- none	45.6
- 1	2.7
- 2	2.9
- 3	5.3
- 4	3.6
- 5	8.0
- 6-8	16.7
- 9-11	8.7
- 12-14	4.6
- 15 or more	1.2
- no answer	0.5

--** Unable to code in a simple tabulation of this sort

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
5. If one or more of your children regularly leaves your classroom to attend a compensatory class, have you noticed any changes in their:	
--general mood	
- A great deal	7.5
- Some	26.7
- Not at all	15.3
- I don't know	3.6
- No answer	46.9
--responsiveness in your class	
- A great deal	10.0
- Some	30.3
- Not at all	11.2
- I don't know	1.7
- No answer	46.9
--attentiveness in your class	
- A great deal	4.1
- Some	28.4
- Not at all	16.3
- I don't know	3.2
- No answer	48.1
--orderliness	
- A great deal	3.2
- Some	21.8
- Not at all	21.8
- I don't know	5.3
- No answer	47.8
--participation in class discussions	
- A great deal	8.7
- Some	29.6
- Not at all	12.6
- I don't know	1.9
- No answer	47.1

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
5. (continued)	
--willingness to share information	
- A great deal	10.7
- Some	27.4
- Not at all	12.4
- I don't know	1.9
- No answer	47.5
--readiness to ask for help	
- A great deal	7.5
- Some	26.7
- Not at all	14.1
--I don't know	4.6
- No answer	47.1
--general level of academic achievement	
- A great deal	9.5
- Some	31.8
- Not at all	9.2
- I don't know	2.4
- No answer	47.1
6. Are you sure the compensatory class was the major cause of those characteristics that improved?	
- yes	20.9
- no	28.2
- no answer	51.0
7. How many children in your classroom have received some services from the Community Teacher assigned to your school?	
- none	41.7
- 1	13.3
- 2	18.4
- 3	5.8
- 4	5.3
- 5	4.1
- 6-8	1.7
- 9-11	1.0
- 12 or more	0.5
- don't know	7.3
- no answer	0.7

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
8. If one or more of the children from your class have received services from the Community Teacher, have you noticed any changes in the following:	
--their attendance has improved	
- A great deal	3.6
- Some	10.7
- Not at all	26.0
- I don't know	4.1
- No answer	55.6
--they seem more interested in school	
- A great deal	3.2
- Some	20.9
- Not at all	19.4
- I don't know	2.9
- No answer	53.6
--they are more attentive in class	
- A great deal	2.4
- Some	20.6
- Not at all	19.4
- I don't know	3.4
- No answer	54.1
--they are more responsive during class	
- A great deal	1.7
- Some	20.6
- Not at all	20.1
- I don't know	2.9
- No answer	54.6
--they are better behaved in the classroom	
- A great deal	3.2
- Some	20.4
- Not at all	19.9
- I don't know	2.9
- No answer	53.6
--they seem to be doing better academic work than before	
- A great deal	2.2
- Some	19.9
- Not at all	19.4
- I don't know	3.6
- No answer	54.8

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
8. (continued)	
--they seem more relaxed and happy	
- A great deal	3.6
- Some	18.0
- Not at all	19.4
- I don't know	4.4
- No answer	54.6
--they are more likely to seek help from me	
- A great deal	5.3
- Some	19.7
- Not at all	16.0
- I don't know	3.9
- No answer	55.1
9. Are you sure the Community Teacher was the major cause of those characteristics that improved?	
- yes	17.7
- no	22.6
- no answer	59.7
10. Have the services of the Community Teacher been available when needed?	
- always or almost always available	26.2
- usually available	21.6
- sometimes available, sometimes not	12.9
- seldom available	4.1
- never or almost never available	1.9
- no answer	33.3
11. Have the following services of the librarian in your school been helpful to you?	
--setting up the school library	
- A great deal	57.5
- Some	25.2
- Not at all	5.1
- I don't know	1.9
- No answer	10.2
--locating materials	
- A great deal	42.7
- Some	32.0
- Not at all	10.2
- I don't know	3.2
- No answer	11.9

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
11. (continued)	
--instructing children in library skills	
- A great deal	39.1
- Some	26.0
- Not at all	17.0
- I don't know	3.2
- No answer	14.8
--storytelling	
- A great deal	36.9
- Some	34.5
- Not at all	17.7
- I don't know	2.2
- No answer	8.7
--other services	
- A great deal	19.4
- Some	1.0
- Not at all	0.0
- I don't know	0.0
- No answer	79.6
12. In the future, what services would you like to receive from the librarian?	**
13. How much service have you received from:	
--the audio-visual resource teacher	
- A great deal	3.6
- Some	13.8
- Not at all	58.3
- I don't know	6.6
- No answer	17.7
--the compensatory resource teacher	
- A great deal	8.5
- Some	14.6
- Not at all	55.6
- I don't know	5.3
- No answer	16.0
--the mathematics resource teacher	
- A great deal	2.2
- Some	7.0
- Not at all	63.8
- I don't know	7.5
- No answer	19.4

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
14. Have you found the services of the resource teachers available when needed?	
--the audio-visual resource teacher	
- A great deal	5.6
- Some	10.7
- Not at all	33.3
- I don't know	22.8
- No answer	27.6
--the compensatory resource teacher	
- A great deal	11.4
- Some	15.3
- Not at all	25.7
- I don't know	22.1
- No answer	22.5
--the mathematics resource teacher	
- A great deal	2.9
- Some	6.8
- Not at all	35.2
- I don't know	26.2
- No answer	28.9
15. In the future what services would you like to receive from the	
--audio-visual resource teacher	**
--compensatory resource teacher	**
--mathematics resource teacher	**
16. Generally speaking, have demonstrations, visitations, meetings, and other in-service training programs been helpful to you this year?	
- very helpful	12.1
- somewhat helpful	31.6
- not particularly helpful	14.1
- was not involved in any in-service training activity	38.8
- no answer	3.4
17. How helpful have the following in-service training activities been to you?	
--demonstrations	
- A great deal	14.1
- Some	28.6
- Not at all	13.8
- I don't know	5.1
- No answer	38.3

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
17. (continued)	
--visitations	
- A great deal	5.8
- Some	17.5
- Not at all	18.9
- I don't know	8.3
- No answer	49.5
--small group meetings	
- A great deal	5.8
- Some	20.1
- Not at all	17.0
- I don't know	6.8
- No answer	50.3
--other in-service activities	
- A great deal	10.7
- Some	0.0
- Not at all	0.5
- I don't know	0.5
- No answer	88.3
18. If in-service training has aided you, could you describe a specific case in which you used what you learned in your in-service training.	**
19. In the future what other type of in-service training would you like to receive?	**
20. If you have had teacher aides how has this added service benefited your teaching situation?	
- A great deal	18.9
- Some	28.4
- Not at all	4.6
- I don't know	4.9
- No answer	43.2
21. How many children from your classroom are receiving services from the Reading Clinic?	
- none	86.7
- 1	2.9
- 2	1.7
- 3 or more	3.4
- no answer	5.3

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
22. How much improvement have you noticed in the reading skills of your children attending the Reading Clinic?	
- A great deal	2.9
- Some	3.4
- Not at all	1.7
- I don't know	1.9
- No answer	90.1
23. Are you sure the Reading Clinic was the major cause of improvement in reading skills?	
- yes	4.4
- no	4.6
- no answer	91.0
24. How many field trips has your class taken this school year (1966-67)?	
- none	12.1
- 1	27.7
- 2	21.1
- 3	15.5
- 4	11.7
- 5 or more	11.4
- no answer	0.5
25. Considering all the field trips your class has taken this year, how successful would you judge field trips to have been?	
- very successful	58.7
- somewhat successful	27.4
- generally disappointing	1.5
- no answer	12.3
--Which field trip was most successful of all?	**
--Which field trip was least successful of all?	**
26. How many of your children regularly attend the afternoon study center?	
- none	72.3
- 1	5.6
- 2	4.1
- 3	4.1
- 4	3.2
- 5	2.4
- 6	1.5
- 7	0.0
- 8 or more	1.2
- no answer	5.6

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
27. If one or more of the children from your class have regularly attended the after-school study center, have you noticed any changes in the following:	
--their attendance has improved	
- A great deal	0.0
- Some	4.4
- Not at all	10.4
- I don't know	2.9
- No answer	82.3
--they seem more interested in school	
- A great deal	1.2
- Some	11.2
- Not at all	6.3
- I don't know	1.7
- No answer	79.6
--they are more attentive in class	
- A great deal	1.0
- Some	10.0
- Not at all	7.5
- I don't know	1.7
- No answer	79.8
--they are more responsive during class	
- A great deal	1.0
- Some	10.4
- Not at all	6.8
- I don't know	1.9
- No answer	79.8
--they are better behaved in the classroom	
- A great deal	0.7
- Some	5.8
- Not at all	10.9
- I don't know	2.4
- No answer	80.1
--they seem to be enjoying school more than before	
- A great deal	1.0
- Some	9.5
- Not at all	6.3
- I don't know	3.2
- No answer	80.1

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
27. (continued)	
--they seem to be doing better academic work than before	
- A great deal	1.7
- Some	12.1
- Not at all	4.9
- I don't know	2.2
- No answer	79.1
--they seem more relaxed and happy	
- A great deal	1.7
- Some	7.0
- Not at all	7.5
- I don't know	3.6
- No answer	80.1
--they are more likely to seek help from me	
- A great deal	2.9
- Some	10.2
- Not at all	5.1
- I don't know	2.2
- No answer	79.6
28. Are you sure the after-school study center was the major cause of those characteristics that improved?	
- yes	5.8
- no	12.6
- no answer	81.6
29. To what extent have the following instructional materials and equipment been useful to you in your teaching this year?	
--filmstrips	
- A great deal	64.3
- Some	31.6
- Not at all	1.0
- I don't know	0.0
- No answer	3.1
--library books	
- A great deal	66.5
- Some	29.9
- Not at all	1.0
- I don't know	0.0
- No answer	2.7

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
29. (continued)	
--listening center	
- A great deal	33.7
- Some	40.5
- Not at all	11.4
- I don't know	3.4
- No answer	10.9
--tape recorder	
- A great deal	40.8
- Some	37.9
- Not at all	9.5
- I don't know	2.4
- No answer	9.5
--filmstrip projector	
- A great deal	66.5
- Some	26.7
- Not at all	1.9
- I don't know	.2
- No answer	4.6
--16mm projector	
- A great deal	41.7
- Some	31.1
- Not at all	10.7
- I don't know	2.2
- No answer	14.3
--primary typewriter	
- A great deal	14.3
- Some	26.9
- Not at all	32.0
- I don't know	5.6
- No answer	21.1
--overhead projector	
- A great deal	14.1
- Some	30.6
- Not at all	31.1
- I don't know	5.6
- No answer	18.7

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
29. (continued)	
--study prints	
- A great deal	35.2
- Some	41.0
- Not at all	10.9
- I don't know	2.9
- No answer	9.9
--films	
- A great deal	52.7
- Some	31.1
- Not at all	6.8
- I don't know	1.5
- No answer	8.0
--records	
- A great deal	45.9
- Some	44.9
- Not at all	4.4
- I don't know	.5
- No answer	4.3
--multiple copies of trade books	
- A great deal	16.3
- Some	26.0
- Not at all	21.8
- I don't know	12.1
- No answer	23.8
--tapes	
- A great deal	29.4
- Some	34.7
- Not at all	14.6
- I don't know	5.6
- No answer	15.7
--realia (exhibits and art objects)	
- A great deal	9.2
- Some	28.9
- Not at all	25.7
- I don't know	10.7
- No answer	25.5

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
29. (continued)	
--individual previewers	
- A great deal	17.5
- Some	35.9
- Not at all	29.6
- I don't know	4.4
- No answer	12.6
--heat copier (Thermo-Fax, Ald-o-Fax, or Standard)	
- A great deal	31.3
- Some	21.4
- Not at all	24.0
- I don't know	6.1
- No answer	17.3
--cameras	
- A great deal	14.6
- Some	29.1
- Not at all	25.5
- I don't know	7.8
- No answer	23.0
--Other instructional materials or equipment	
- A great deal	14.1
- Some	0.0
- Not at all	0.0
- I don't know	0.0
- No answer	85.9
30. To what extent has the multi-media library (film strips, records, study prints, etc) affected your classroom teaching?	
- A great deal	47.8
- Some	37.9
- Not at all	3.6
- I don't know	0.5
- No answer	10.2
31. Considering the total program of your school this year (1966-67), how does it compare in quality to last (1965-66)?	
- was not teaching in this school last year so cannot answer question	22.6
- this year seems very much better	14.6
- this year seems somewhat better	30.8
- this year seems neither better nor worse than last	22.3
- this year seems somewhat worse	6.1
- this year seems very much worse	1.7
- no answer	2.0

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
32. From your impressions of the ESEA program as it has operated this year, how do you think the program should be planned for the future?	
- should be expanded in all or nearly all of its parts	27.2
- should be expanded in some parts while other parts remain about as they are now	38.6
- should remain about as it has been in 1966-67	10.0
- should be curtailed in some parts while other parts remain about as they are now	10.9
- should be curtailed in all or nearly all of its parts	1.0
- should be discontinued completely	.5
- no opinion	10.0
- no answer	1.9
33. How many children in your classroom have received some services from the Social Worker assigned to your school?	
- none	48.3
- 1	9.7
- 2	8.0
- 3	5.6
- 4	2.4
- 5	2.2
- 6-8	1.9
- 9-11	0.7
- 12 or more	0.5
- don't know	20.6
- no answer	0.0
34. If one or more of the children from your class have received services from the Social Worker, have you noticed any changes in the following:	
--their attendance has improved	
- A great deal	1.7
- Some	6.1
- Not at all	15.0
- I don't know	6.3
- No answer	70.9
--they seem more interested in school	
- A great deal	1.0
- Some	7.5
- Not at all	14.1
- I don't know	6.3
- No answer	71.1

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
34. (continued)	
--they are more attentive in class	
- A great deal	0.7
- Some	7.3
- Not at all	14.8
- I don't know	6.1
- No answer	71.1
--they are more responsive during class	
- A great deal	0.5
- Some	7.8
- Not at all	14.6
- I don't know	6.6
- No answer	70.6
--they are better behaved in the classroom	
- A great deal	1.2
- Some	8.3
- Not at all	13.3
- I don't know	6.6
- No answer	70.6
--they seem to be enjoying school more than before	
- A great deal	1.5
- Some	6.3
- Not at all	13.1
- I don't know	8.0
- No answer	71.1
--they seem to be doing better academic work than before	
- A great deal	1.0
- Some	7.0
- Not at all	14.3
- I don't know	6.6
- No answer	71.1
--they seem more relaxed and happy	
- A great deal	1.5
- Some	6.6
- Not at all	12.9
- I don't know	7.8
- No answer	71.4

RESPONSES TO TEACHER QUESTIONNAIRE IN ELEMENTARY SCHOOLS

QUESTIONS AND RESPONSE CATEGORIES	N-412 %
34. (continued)	
--they are more likely to seek help from me	
- A great deal	
- Some	1.5
- Not at all	8.5
- I don't know	11.7
- No answer	7.0
	71.1
35. Are you sure the Social Worker was the major cause of those characteristics that improved?	
- yes	
- no	4.9
- no answer	16.7
	78.4
36. How many children from your classroom are receiving services from the Speech Therapist?	
- none	
- 1	26.4
- 2	19.9
- 3	24.5
- 4	13.1
- 5 or more	7.0
- no answer	5.1
	3.9
37. How much improvement have you been able to detect in the children from your class who are receiving services of the Speech Therapist?	
- A great deal	
- Some	15.8
- Not at all	40.0
- I don't know	8.5
- No answer	3.4
	32.3

SECTION B
ELEMENTARY SCHOOL TEACHERS

Factors:	How Much of a Problem							Time Needed						
	Very Important Problem 1	2	3	4	No Problem At All 5	No Answer	Median Rating	Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	43.4%	21.8%	21.4%	5.6%	4.9%	2.9%	2.23	2.4%	8.7%	42.7%	26.7%	12.9%	6.6%	3.83
2. Maintaining discipline and control within the classroom	33.3	13.6	20.6	14.6	15.8	2.2	3.10	11.7	17.0	28.4	20.9	16.0	5.8	3.65
3. Motivating children; getting them interested and participating	31.6	19.9	20.1	14.6	11.9	1.9	2.88	6.3	14.3	32.8	22.3	18.9	5.3	3.81
4. Finding content appropriate to the children's needs	29.6	22.8	18.4	14.6	11.9	2.6	2.84	7.3	13.3	36.9	25.0	11.7	5.8	3.72
5. Finding time to do all the things other than teaching that have to be done	35.2	25.7	21.4	9.7	6.1	1.9	2.54	4.9	14.6	42.0	20.9	11.7	6.1	3.66
6. Evaluating pupil performance and assigning grades	15.5	15.3	30.3	17.0	18.4	3.4	3.58	8.0	22.3	44.2	14.8	3.6	7.0	3.37
7. Coping with interruptions of classroom routine	16.5	14.1	21.8	21.4	23.8	2.4	3.83	25.7	21.6	33.0	10.2	4.6	4.9	3.01
8. Getting supplies, instructional materials, or special services when I need them	10.4	11.7	18.7	19.7	37.4	2.2	4.41	33.5	23.3	26.5	8.5	2.9	5.3	2.59

Appendix C

JUNIOR AND SENIOR HIGH SCHOOL TEACHER QUESTIONNAIRE AND TABULATION OF RESULTS

Only the junior high teacher questionnaire is shown. The senior high teacher questionnaire is identical, except for question 25, which was asked at the junior high level only.

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
OFFICE OF COMPENSATORY EDUCATION
ROOM 213-A, 135 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102

June 6, 1967

To: Classroom Teachers, Counselors, and Administrators
ESEA - Junior and Senior High Schools

From: Dr. Lewis Albee, Assistant Superintendent, Senior High Schools
Mr. James Dierke, Assistant Superintendent, Junior High Schools
Mr. Harold L. Weeks, Director, Research
Mr. Victor Rossi, Supervisor, Compensatory Education

This month marks the end of the first full year of the ESEA Title I Compensatory Education Program. It should now be possible to view the strengths and weaknesses of the program with a perspective that was not possible a year ago.

Attached is a questionnaire prepared for all classroom teachers, counselors, and administrators in ESEA schools. Although the questionnaire may appear as complex as the program itself, your opinions are a vital part of the evaluation and your cooperation would be deeply appreciated.

You may be sure that all comments and responses will be treated as confidential. No one is asked to sign their name to the questionnaire, although you are free to do so if you wish. Questionnaires should be sealed in the attached envelope and returned to your school secretary no later than June 16, 1967. When reassembled, all questionnaires will be tabulated by Stanford Research Institute. The report of replies will be completely anonymous.

If the ESEA Compensatory Program is to be improved, it must have the benefit of your criticism and suggestions. Please be candid and constructive. Your help is essential.

JUNIOR HIGH SCHOOLS
May/June 1967

Opinion Survey
of the
ESEA Program

Please respond to the appropriate items:

a. Name of your school ______________________________

b. Type of position

9-1 ___ teacher

-2 ___ administrator

-3 ___ ESEA teacher

-4 ___ counselor

c. 10- 11- Subject taught ______________________________

d. Grade levels at which you taught in 1966-67

12- 13- 14- ______________ Fall 1966

16- 17- 18- ______________ Spring 1967

e. Average number of children in your classes in 1966-67

19- 20- 21- ______________ Fall 1966

22- 23- 24- ______________ Spring 1967

f. Number of aides and volunteers assisting you, if any:

Fall 1966

25- 26- ______________ aides

27- 28- ______________ volunteers

Spring 1967

29- 30- ______________ aides

31- 32- ______________ volunteers

g. Years of experience in the San Francisco Unified School District

33-1___ 1 or less
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6
-7___ 7-8
-8___ 9-10
-9___ More than 10 (SPECIFY NUMBER): _____

h. Years you have spent at this school

34-1___ 1 or less
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6
-7___ 7-8
-8___ 9-10
-9___ More than 10 (SPECIFY NUMBER): _____

	-1 A great deal	-2 Some	-3 Not at all	-4 I don't know	
35-	___	___	___	___	1. To what extent have the increased ESEA teacher positions affected your classroom situation?
36-	___	___	___	___	2. Do you think the reduced class size (maximum 18 students per period) in the ESEA program is of any value?

3. Are you familiar with the way in which ESEA Compensatory students are selected in your school?

37-1___ very familiar
-2___ somewhat familiar
-3___ not familiar at all

4. Is the present method of selecting ESEA (Compensatory students) generally satisfactory?

38-1___ yes
-2___ no

5. On the average in your school, in how many ESEA classes do ESEA Compensatory students participate?

39-1___ 1
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6
-7___ Don't know

6. Do you think that the average number of classes in which ESEA Compensatory students participate (as you've shown in your answer to the previous question) is about the right number?

40-1___ yes
-2___ no

If "no," then how many would you say is appropriate?

41-0___ None (don't think special classes are the answer)
-1___ 1
-2___ 2
-3___ 3
-4___ 4
-5___ 5
-6___ 6

7. If limitations in resources meant that ESEA Compensatory classes could be offered in no more than four subject areas, which four would you specify and in what order would you rank them?

42-
43- ____________________ First importance

44-
45- ____________________ Second importance

46-
47- ____________________ Third importance

48-
49- ____________________ Fourth importance

8. How frequently do you have an opportunity to directly observe ESEA Compensatory students in a classroom?

50-1___ very often
-2___ often
-3___ only occasionally
-4___ very seldom
-5___ never or almost never

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
51-	9. In general, have you observed more improvement than might normally be expected in the academic achievement of ESEA Compensatory students?				
	10. In general, have you observed any changes in the following behavior of ESEA Compensatory students?				
52-	improvement in general school attendance				
53-	improved attendance in specific classes				
54-	behavior in the classroom (e.g., more attentive, better mannered)				
55-	generally more mature				
56-	improved all-around citizenship				
57-	better attitudes toward school				
	Other areas of improvement (PLEASE SPECIFY)				
58-	____________________				
59-	____________________				
60-	____________________				
61-	____________________				

11. In your opinion, do ESEA Compensatory students, in general, have any particular attitude(s) about participating in the ESEA program?

62-1___ students like the program
-2___ students have mixed feelings
-3___ students dislike the program
-4___ I don't know

12. By what standards do you think that ESEA Compensatory students ought to be graded?

63-1___ by the same standards that prevail in regular classes
-2___ by District-wide standards developed for ESEA students
-3___ by whatever standards the teacher considers appropriate to the individual students
-4___ by some standard other than one of the above (PLEASE DESCRIBE):

____

____

13. Should staffing for ESEA Compensatory classes be restricted to those teachers who express a desire to participate in the program?

64-1___ yes
-2___ no
-3___ no opinion

14. In your opinion, what special qualities, skills, or talents should a teacher have to teach ESEA Compensatory classes?

	-1 A great deal	-2 Some	-3 Not at all	-4 I don't know	
65-	___	___	___	___	has skill in audio-visual teaching techniques
66-	___	___	___	___	has genuine affection for students
67-	___	___	___	___	is interested in trying new materials and methods
68-	___	___	___	___	understands the environmental factors of the culturally disadvantaged
69-	___	___	___	___	has sound academic preparation in subject field

(14. continued next page)

14. (continued)

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
70-	is interested in using community resources, i.e., guest speakers, enrichment trips, etc.				
71-	exhibits interest in professional growth, i.e., in-service courses, advanced work, community participation				
72-	maintains discipline				
73-	has empathy toward persons from different cultural background				

15. From your experience, how frequently and how intensively do ESEA Compensatory program teachers discuss the ESEA program with other teachers?

74-1___ frequently and intensively
-2___ frequently but superficially
-3___ infrequently but intensively
-4___ infrequently and superficially
-5___ do not discuss at all

16. Do you know the present method of fund allocation to ESEA schools?

75-1___ yes
-2___ no

17. On the basis of what you do know about how ESEA funds are allocated, do you consider the procedures satisfactory?

76-1___ consider the procedures satisfactory
-2___ have no basis for judging whether or not the procedures are satisfactory
-3___ consider the procedures unsatisfactory and would suggest that they be changed in the following ways (PLEASE SPECIFY):

____

____

18. So far as you are aware, are ESEA Compensatory program funds expended effectively in your school?

77-1___ very effectively
-2___ fairly effectively
-3___ not effectively
-4___ have no basis for judging

		-1 A great deal	-2 Some	-3 Not at all	-4 I don't know
78-	19. Has the additional ESEA equipment and materials (audio-visual machines, duplicating machines, film strips, records, etc.) affected your classroom teaching?	___	___	___	___
80-1	20. To what extent have the items of instructional material and equipment been useful?				
8-	Machine for making ditto masters and transparencies	___	___	___	___
9-	Motion picture projector	___	___	___	___
10-	Film strip projector	___	___	___	___
11-	Overhead projector	___	___	___	___
12-	Tape recorder	___	___	___	___
13-	Phonograph	___	___	___	___
14-	Listening center	___	___	___	___
15-	Individual film strip previewer	___	___	___	___
16-	Flash cards and instructional games	___	___	___	___
17-	Screens	___	___	___	___
18-	Camera	___	___	___	___
19-	Portable tape recorder	___	___	___	___
20-	Multi-media library (film strips and records)	___	___	___	___
21-	Controlled Reader	___	___	___	___
22-	Special reading film strip series	___	___	___	___

	-1 A great deal	-2 Some	-3 Not at all	-4 I don't know	
					21. In your opinion, have the following auxiliary services helped you?
23-	___	___	___	___	Reading Center
24-	___	___	___	___	Paid Aides
25-	___	___	___	___	ESEA study trips and paid admissions
26-	___	___	___	___	District Resource Teacher
27-	___	___	___	___	Community Resource Teacher
28-	___	___	___	___	Audio-Visual Resource Teacher
29-	___	___	___	___	ESEA Counselors (some schools do not have an ESEA counselor).
30-	___	___	___	___	In-Service Training and Classroom Visitations
31-	___	___	___	___	Substitute time allowed for In-Service Training and meetings.
32-	___	___	___	___	22. Do you think the ESEA program has been of value to your school?

23. Do you think the ESEA program should be:

33-1___ increased
-2___ remain the same
-3___ decreased
-4___ discontinued

24. Check to indicate if you would like to know more about the ESEA program:

34-1___ in the elementary school
-2___ in the junior high school
-3___ in the senior high school
-4___ community services
-5___ your school

25. Please list in priority rank the ESEA Title I Programs you feel are most productive and beneficial to compensatory type students.

priority ranking	ESEA Title I Program Numbers
35- (__)	2-1 Compensatory Reading
36- (__)	2-3 Reading Resource
37- (__)	2-5 Compensatory Social Worker
38- (__)	2-7 Compensatory Gifted Program

SECTION B

INSTRUCTIONS

Many factors make teaching both difficult and demanding and also influence the way a teacher's time is spent. Some of the things that teachers often mention are listed below. Opposite each factor, check the space that indicates (1) how much of a problem each has been for you during the 1966-67 school year, and (2) how much time you've needed to deal with them.

Some of the considerations listed may be more prominent at certain times of the school year than at other times. When you think of your response to each question, try to average out these variations so that your answer reflects the whole school year 1966-67.

	How much of a problem is each factor for you?	About what portion of your time is needed to deal with each problem?
	Very important problem ... No problem at all	Virtually no time ... Practically all my time
1. Figuring out how to provide for individual differences among pupils	:___:___:___:___:___: 39- 1 2 3 4 5	:___:___:___:___:___: 40- 1 2 3 4 5
2. Maintaining discipline and control within the classroom	:___:___:___:___:___: 41- 1 2 3 4 5	:___:___:___:___:___: 42- 1 2 3 4 5
3. Motivating children; getting them interested and participating	:___:___:___:___:___: 43- 1 2 3 4 5	:___:___:___:___:___: 44- 1 2 3 4 5
4. Finding content appropriate to the children's needs	:___:___:___:___:___: 45- 1 2 3 4 5	:___:___:___:___:___: 46- 1 2 3 4 5
5. Finding time to do all the things other than teaching that have to be done	:___:___:___:___:___: 47- 1 2 3 4 5	:___:___:___:___:___: 48- 1 2 3 4 5

	How much of a problem is each factor for you?		About what portion of your time is needed to deal with each problem?	
	Very important problem	No problem at all	Virtually no time	Practically all my time
6. Evaluating pupil performance and assigning grades	:___:___:___:___:___: 49- 1 2 3 4 5		:___:___:___:___:___: 50- 1 2 3 4 5	
7. Coping with interruptions of classroom routine	:___:___:___:___:___: 51- 1 2 3 4 5		:___:___:___:___:___: 52- 1 2 3 4 5	
8. Getting supplies, instructional materials, or special services when I need them	:___:___:___:___:___: 53- 1 2 3 4 5		:___:___:___:___:___: 54- 1 2 3 4 5	

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

		JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
		N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
a. Name of your school[1]							
b. Type of position (this breakdown shown in table headings)		--	--	--	--	--	--
- teacher							
- administrator							
- ESEA teacher							
- counselor							
c. Subject taught[2]							
d. Grade levels at which you taught in 1966-67[3]							
- junior high:	Seventh	75.0	66.9	12.2			
	Eighth	69.4	77.4	19.5			
	Ninth	63.9	78.2	12.2			
- senior high:	Tenth				82.1	83.2	20.0
	Eleventh				92.9	89.2	26.7
	Twelfth				82.1	88.0	26.7
SPRING 1967							
- junior high:	Seventh	80.6	72.3	14.6			
	Eighth	75.0	83.3	14.6			
	Ninth	75.0	81.2	14.6			
- senior high:	Tenth				85.7	86.2	20.0
	Eleventh				92.9	89.2	20.0
	Twelfth				78.6	88.6	20.0
e. Average number of children in your classes in 1966-67[2]		--	--	--	--	--	--
f. Number of aides and volunteers assisting you, if any:							
FALL 1966							
- aides	None	86.1	95.2	92.7	71.4	93.4	60.0
	1	5.6	4.6	0.0	14.3	6.0	6.7
	2	5.6		4.9	10.7	0.6	13.3
	3	0.0		0.0	3.6		13.3
	4	2.8		2.4			0.0
	5						6.7
	6						
	7						
	8						

---

* ESEA TEACHERS
** TEACHERS (NO ESEA CLASSES)
*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

[1] Not coded.

[2] Unable to code on a simple tabulation of this sort.

[3] Responses to this question will not total 100% as some teachers taught at more than one grade level.

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

		JUNIOR HIGH-(N-449)			SENIOR-HIGH-(N-210)		
		N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
f. (continued)							
- No answer			0.3				
- Volunteers	None	100.0	97.6	97.6	96.4	97.0	86.7
	1		1.1	2.4	3.6	0.0	0.0
	2		0.3			0.6	6.7
	3		0.3			0.0	6.7
	4		0.3			0.6	
	5					0.6	
	6						
	7						
	8						
- No answer			0.5				
SPRING 1967							
- aides	None	61.1	87.1	90.2	67.9	91.6	60.0
	1	22.2	10.5	2.4	14.3	5.4	0.0
	2	13.9	1.9	4.9	10.7	2.4	13.3
	3	0.0	0.3	0.0	3.6	0.0	13.3
	4	2.8		2.4	3.6	0.0	0.0
	5					0.0	6.7
	6					0.6	0.0
	7						0.0
	8						6.7
- No answer			0.3				
- volunteers	None	94.4	96.5	97.6	85.7	95.8	86.7
	1	2.8	1.9	2.4	10.7	1.8	6.7
	2		0.5		3.6	0.6	6.7
	3		0.5			0.6	
	4		0.3			0.0	
	5					1.2	
	6						
	7						
	8	2.8					
- No answer			0.3				

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
g. Years of experience in the San Francisco Unified School District						
- 1 or less	11.1	14.5	0.0	10.7	9.0	0.0
- 2	8.3	7.3	2.4	21.4	8.4	6.7
- 3	16.7	5.6	2.4	10.7	10.8	0.0
- 4	5.6	5.6	4.9	7.1	7.8	0.0
- 5	5.6	3.8	0.0	3.6	11.4	0.0
- 6	5.6	8.6	2.4	3.6	3.6	0.0
- 7-8	5.6	7.5	0.0	14.3	10.8	6.7
- 9-10	2.8	7.0	2.4	3.6	9.6	6.7
- More than 10	36.1	39.5	80.5	25.0	28.7	80.0
- No answer	2.8	0.5	4.8	0.0	0.0	0.0
h. Years you have spent at this school						
- 1 or less	16.7	18.5	4.9	14.3	16.2	13.3
- 2	19.4	8.1	2.4	28.6	10.8	20.0
- 3	13.9	5.4	4.9	14.3	14.4	0.0
- 4	8.3	7.3	7.3	10.7	17.4	6.7
- 5	8.3	4.3	0.0	3.6	8.4	6.7
- 6	2.8	8.6	2.4	3.6	2.4	0.0
- 7-8	2.8	7.3	2.4	10.7	7.8	6.7
- 9-10	2.8	10.2	19.5	0.0	7.8	0.0
- More than 10	22.2	29.6	51.2	14.3	15.0	46.7
- No answer	2.8	0.8	2.4	0.0	0.0	0.0
1. To what extent have the increased ESEA teacher positions affected your classroom situation?						
- A great deal	44.4	10.8	24.4	50.0	9.0	6.7
- Some	36.1	33.9	24.4	42.9	24.6	46.7
- Not at all	5.6	34.4	17.1	7.1	49.1	20.0
- I don't know	8.3	18.3	2.4	0.0	15.0	0.0
- No answer	5.6	2.7	31.7	0.0	2.4	26.7

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36	N- 372	N-41	N-28	N-167	N-15
	(A)*	(B)**	(C)***	(A)*	(B)**	(C)***
	%	%	%	%	%	%
2. Do you think the reduced class size (maximum 18 students per period) in the ESEA program is of any value?						
- A great deal	88.9	66.4	78.0	89.3	51.5	53.3
- Some	11.1	14.8	12.2	10.7	23.4	13.3
- Not at all	0.0	1.9	2.4	0.0	5.4	6.7
- I don't know	0.0	16.1	2.4	0.0	18.0	13.3
- No answer	0.0	0.8	4.9	0.0	1.8	13.3
3. Are you familiar with the way in which ESEA Compensatory students are selected in your school?						
- Very familiar	77.8	27.4	85.4	67.9	25.7	73.3
- Somewhat familiar	22.2	46.5	9.8	32.1	46.7	20.0
- Not familiar at all	0.0	25.0	4.9	0.0	26.9	0.0
- No answer	0.0	11.0	0.0	0.0	0.6	6.7
4. Is the present method of selecting ESEA (Compensatory students) generally satisfactory?						
- Yes	75.0	54.6	85.4	71.4	49.1	60.0
- No	16.7	19.6	9.8	28.6	25.1	40.0
- Undecided	5.6	7.8	0.0	0.0	6.6	0.0
- No answer	2.8	18.0	4.9	0.0	19.2	0.0
5. On the average in your school, in how many ESEA classes do ESEA Compensatory students participate?						
- 1	8.3	2.7	9.8	3.6	1.8	6.7
- 2	19.4	14.0	31.7	42.9	17.4	53.3
- 3	36.1	17.5	26.8	32.1	11.4	13.3
- 4	16.7	6.7	12.2	3.6	3.6	0.0
- 5	0.0	0.5	0.0	0.0	0.0	0.0
- 6	2.8	3.0	2.4	0.0	0.6	0.0
- Don't know	16.7	52.4	9.8	17.9	63.5	26.7
- No answer	0.0	3.2	7.3	0.0	1.8	0.0

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
6. Do you think that the average number of classes in which ESEA Compensatory students participate (as you've shown in your answer to the previous question) is about the right number?						
- Yes	66.7	39.8	61.0	57.1	31.1	33.3
- No	19.4	21.5	24.4	32.1	15.0	53.3
- No answer	13.9	38.8	14.6	10.7	53.9	13.3
If "no" then how many would you say is appropriate?						
- None (don't think special classes are the answer)	2.8	3.2	0.0	3.6	3.6	6.7
- 1		.5	0.0	0.0	0.0	0.0
- 2	2.8	.3	2.4	3.6	0.6	6.7
- 3	8.3	5.4	9.8	10.7	1.8	20.0
- 4	2.8	4.6	7.3	10.7	3.6	20.0
- 5	0.0	.8	2.4	3.6	3.0	0.0
- 6	2.8	4.6	2.4	7.1	2.4	0.0
- No answer	80.6	80.6	75.6	60.7	85.0	46.6
7. If limitations in resources meant that ESEA Compensatory classes could be offered in no more than four subject areas, which four would you specify and in what order would you rank them?	--Unable to code on a simple tabulation of this sort.					
8. How frequently do you have an opportunity to directly observe ESEA Compensatory students in a classroom?						
- Very often	75.0	14.5	19.5	89.3	7.8	13.3
- Often	16.7	7.8	29.3	3.6	7.2	6.7
- Only occasionally	0.0	15.1	26.8	3.6	12.6	46.7
- Very seldom	0.0	15.1	7.3	0.0	12.6	13.3
- Never or almost never	5.6	44.4	14.6	0.0	58.1	13.3
- No answer	2.8	3.2	2.4	3.6	1.8	6.7

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINSTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
9. In general, have you observed more improvement than might normally be expected in the academic achievement of ESEA Compensatory students?						
- A great deal	50.0	9.1	24.4	35.7	4.2	6.7
- Some	36.1	34.9	51.2	53.6	22.2	60.0
- Not at all	8.3	9.4	7.3	3.6	13.8	13.3
- I don't know	5.6	35.5	7.3	7.1	50.9	13.3
- No answer	0.0	11.0	9.7	0.0	9.0	6.7
10. In general, have you observed any changes in the following behavior of ESEA Compensatory students?						
--improvement in general school attendance						
- A great deal	25.0	4.6	17.1	28.6	1.8	13.3
- Some	52.8	24.7	41.5	28.6	18.6	33.3
- Not at all	8.3	16.4	9.8	14.3	18.0	26.7
- I don't know	11.1	40.9	17.1	21.4	49.7	26.7
- No answer	2.8	13.4	14.6	7.1	12.0	0.0
--improved attendance in specific classes						
- A great deal	27.8	6.7	19.5	32.1	4.2	6.7
- Some	41.7	20.4	46.3	25.0	15.6	46.7
- Not at all	8.3	12.1	4.9	7.1	12.6	20.0
- I don't know	19.4	46.5	12.2	21.4	54.5	26.7
- No answer	2.8	14.2	17.1	14.2	13.2	0.0
--behavior in the classroom (e.g., more attentive, better mannered)						
- A great deal	47.2	8.9	29.3	46.4	7.2	6.7
- Some	30.6	32.3	43.9	35.7	22.8	53.3
- Not at all	13.9	13.4	4.9	7.1	14.4	33.3
- I don't know	8.3	32.3	4.9	3.6	43.7	6.7
- No answer	0.0	13.2	17.1	7.1	12.0	0.0

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36	N--372	N-41	N-28	N-167	N-15
	(A)*	(B)**	(C)***	(A)*	(B)**	(C)***
	%	%	%	%	%	%
10. (continued)						
--generally more mature						
- A great deal	19.4	3.2	12.2	21.4	2.4	0.0
- Some	47.2	24.7	41.5	39.3	20.4	53.3
- Not at all	19.4	20.4	7.3	21.4	17.4	26.7
- I don't know	8.3	37.9	22.0	7.1	47.9	20.0
- No answer	5.6	13.7	17.1	10.7	12.0	0.0
--improved all-around citizenship						
- A great deal	27.8	5.4	24.4	21.4	4.8	6.7
- Some	50.0	30.9	51.2	39.3	20.4	53.3
- Not at all	13.9	15.9	4.9	21.4	15.0	33.3
- I don't know	8.3	34.4	4.9	7.1	47.3	6.7
- No answer	0.0	13.5	14.6	10.7	12.6	0.0
--better attitudes toward school						
- A great deal	38.9	7.0	29.3	32.1	4.2	13.3
- Some	41.7	33.1	53.7	46.4	25.7	46.7
- Not at all	8.3	14.2	4.9	3.6	10.8	26.7
- I don't know	8.3	32.0	2.4	7.1	47.3	13.3
- No answer	2.8	13.7	9.7	10.7	12.0	0.0
--other areas of improvement						
- A great deal	2.8	1.1	2.4	14.3	1.2	--
- Some	11.1	3.8	4.9	17.9	3.0	--
- Not at all	0.0	0.0	0.0	0.0	0.0	--
- I don't know	0.0	1.9	0.0	0.0	3.6	--
- No answer	86.1	93.2	92.6	67.9	92.2	--
11. In your opinion do ESEA Compensatory students, in general, have any particular attitude(s) about participating in the ESEA program?						
- Students like the program	36.1	14.8	39.0	42.9	12.0	40.0
- Students have mixed feelings	50.0	29.6	43.9	46.4	28.1	40.0
- Students dislike the program	5.6	3.0	0.0	0.0	0.6	0.0
- I don't know	8.3	49.2	12.2	7.1	59.3	20.0
- No answer	0.0	3.5	4.9	3.6	0.0	0.0

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
12. By what standards do you think that ESEA Compensatory students ought to be graded?						
- By the same standards that prevail in regular classes	11.1	11.8	4.9	17.9	9.6	20.0
- By district-wide standards developed for ESEA students	5.6	17.2	9.8	10.7	22.2	20.0
- by whatever standards the teacher considers appropriate to the individual students	66.7	55.4	70.7	60.7	55.1	53.3
- By some standard other than one of the above	13.9	7.5	9.8	7.1	7.2	6.7
- No answer	2.8	8.1	4.9	3.6	6.0	0.0
13. Should staffing for ESEA Compensatory classes be restricted to those teachers who express a desire to participate in the program?						
- Yes	86.1	77.2	85.4	96.4	82.0	93.3
- No	8.3	7.5	9.8	3.6	6.0	6.7
- No opinion	2.8	12.4	0.0	0.0	10.8	0.0
- No answer	2.8	3.0	4.9	0.0	1.2	0.0
14. In your opinion, what special qualities, skills, or talents should a teacher have to teach ESEA Compensatory classes?						
--has skill in audio-visual teaching techniques						
- A great deal	25.0	37.4	34.1	35.7	31.7	20.0
- Some	58.3	44.4	51.2	53.6	49.1	80.0
- Not at all	5.6	3.2	2.4	0.0	3.0	0.0
- I don't know	2.8	3.2	2.4	0.0	3.0	0.0
- No answer	8.3	11.8	9.8	10.7	13.2	0.0

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36	N--372	N-41	N-28	N-167	N-15
	(A)*	(B)**	(C)***	(A)*	(B)**	(C)***
	%	%	%	%	%	%
14. (continued)						
--has genuine affection for students						
- A great deal	83.3	71.2	90.2	89.3	65.9	100.0
- Some	13.9	16.1	2.4	7.1	21.0	0.0
- Not at all	0.0	1.6	0.0	0.0	2.4	0.0
- I don't know	0.0	2.4	0.0	0.0	4.8	0.0
- No answer	2.8	8.6	7.3	3.6	6.0	0.0
--understands the environmental factors of the culturally disadvantaged						
- A great deal	86.1	70.2	85.4	67.9	70.7	93.3
- Some	11.1	18.8	7.3	21.4	21.0	6.7
- Not at all	0.0	1.1	2.4	3.6	1.2	0.0
- I don't know	0.0	2.4	0.0	0.0	3.0	0.0
- No answer	2.8	7.5	4.9	7.1	4.2	0.0
--has sound academic preparation in subject field						
- A great deal	50.0	55.1	56.1	53.6	56.9	40.0
- Some	44.4	30.6	39.0	28.6	29.3	60.0
- Not at all	0.0	3.0	0.0	7.1	1.8	0.0
- I don't know	0.0	2.2	0.0	0.0	4.2	0.0
- No answer	5.6	9.1	4.9	10.7	7.8	0.0
--is interested in using community resources, i.e., guest speakers, enrichment trips, etc.						
- A great deal	41.7	41.9	48.8	50.0	55.1	60.0
- Some	50.0	41.7	41.5	28.6	31.1	40.0
- Not at all	2.8	3.2	2.4	10.7	1.2	0.0
- I don't know	2.8	3.2	0.0	3.6	4.2	0.0
- No answer	2.8	9.9	7.3	7.1	8.4	0.0

---

* ESEA TEACHERS
** TEACHERS (NO ESEA CLASSES)
*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
14. (continued)						
--exhibits interest in professional growth, i.e., in-service courses, advanced work, community participation						
- A great deal	50.00	37.1	58.5	42.9	44.9	66.7
- Some	41.7	44.6	31.7	32.1	37.1	26.7
- Not at all	2.8	4.8	2.4	10.7	4.2	6.7
- I don't know	2.8	3.5	0.0	7.1	4.2	0.0
- No answer	2.8	9.9	7.3	7.1	9.6	0.0
--maintains discipline						
- A great deal	69.4	65.1	70.7	46.4	49.7	53.3
- Some	30.6	22.6	24.4	42.9	37.1	46.7
- Not at all	0.0	1.3	0.0	3.6	1.8	0.0
- I don't know	0.0	2.2	0.0	0.0	1.8	0.0
- No answer	0.0	8.8	4.9	7.1	9.6	0.0
--has empathy toward persons from different cultural background						
- A great deal	77.8	65.9	80.5	89.3	66.5	86.7
- Some	19.4	17.7	9.8	3.6	19.2	6.7
- Not at all	0.0	2.7	2.4	0.0	3.0	6.7
- I don't know	0.0	2.4	0.0	0.0	3.0	0.0
- No answer	2.8	11.2	7.3	7.1	8.4	0.0
15. From your experience, how frequently and how intensively do ESEA Compensatory program teachers discuss the ESEA program with other teachers?						
- Frequently and intensively	22.2	13.2	31.7	42.9	7.8	20.0
- Frequently but superficially	16.7	11.0	17.1	3.6	9.0	0.0
- Infrequently but intensively	27.8	19.4	22.0	14.3	21.0	26.7
- Infrequently and superficially	25.0	25.0	19.5	28.6	29.3	20.0
- Do not discuss at all	2.8	21.5	0.0	7.1	25.1	13.3
- No answer	5.6	10.0	9.8	3.6	7.8	20.0

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
16. Do you know the present method of fund allocation to the ESEA schools?						
- Yes	38.9	14.8	63.4	35.7	13.8	26.7
- No	61.1	82.0	36.6	64.3	84.4	66.7
- No answer	0.0	3.2	0.0	0.0	1.8	6.7
17. On the basis of what you do know about how ESEA funds are allocated, do you consider the procedures satisfactory?						
- Consider the procedures satisfactory	13.9	6.2	26.8	14.3	6.0	26.7
- Have no basis for judging whether or not the procedures are satisfactory	61.1	67.7	29.3	50.0	67.7	46.7
- Consider the procedures unsatisfactory and would suggest that they be changed	22.2	7.0	19.5	17.9	8.4	13.3
- No answer	2.8	19.0	24.4	17.9	18.0	13.3
18. So far as you are aware, are ESEA Compensatory program funds expended effectively in your school?						
- Very effectively	33.3	14.8	46.3	17.9	12.0	33.3
- Fairly effectively	27.8	20.2	31.7	64.3	26.9	33.3
- Not effectively	5.6	9.1	2.4	3.6	9.6	13.3
- Have no basis for judging	30.6	52.2	17.1	14.3	49.1	13.3
- No answer	2.8	3.8	2.4	0.0	2.4	6.7

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
19. Has the additional ESEA equipment and materials (audio-visual machines, duplicating machines, film strips, records, etc.) affected your classroom teaching?						
- A great deal	47.2	8.6	4.9	57.1	12.0	26.7
- Some	33.3	36.0	17.1	32.1	35.9	13.3
- Not at all	13.9	38.2	17.1	7.1	36.5	20.0
- I don't know	5.6	8.3	7.3	0.0	8.4	13.3
- No answer	0.0	8.9	53.6	3.6	7.2	26.6
20. To what extent have the items of instructional material and equipment been useful?						
--Machine for making ditto masters and transparencies						
- A great deal	50.0	28.8	43.9	46.4	22.8	46.7
- Some	33.3	22.8	12.2	25.0	13.8	6.7
- Not at all	11.1	16.7	7.3	17.9	21.6	6.7
- I don't know	2.8	17.5	4.9	3.6	22.8	33.3
- No answer	2.8	14.3	31.7	7.2	19.2	6.7
--Motion picture projector						
- A great deal	33.3	17.2	24.4	28.6	9.6	13.3
- Some	41.7	23.9	22.0	39.3	23.4	33.3
- Not at all	19.4	23.1	9.8	25.0	23.4	13.3
- I don't know	2.8	18.8	7.3	0.0	24.6	33.3
- No answer	2.8	16.9	36.6	7.2	19.2	6.7
--Film strip projector						
- A great deal	30.6	12.6	19.5	32.1	10.2	26.7
- Some	41.7	22.8	26.8	46.4	24.6	20.0
- Not at all	25.0	28.2	7.3	17.9	23.4	13.3
- I don't know	0.0	19.4	4.9	0.0	24.6	33.3
- No answer	2.8	17.0	41.5	3.6	17.4	6.7

---

* ESEA TEACHERS
** TEACHERS (NO ESEA CLASSES)
*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATAGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
20. (continued)						
--Overhead projector						
- A great deal	41.7	15.3	29.3	28.6	9.0	26.4
- Some	27.8	21.8	19.5	39.3	18.6	33.3
- Not at all	25.0	27.4	4.9	28.6	28.1	6.7
- I don't know	0.0	18.8	4.9	0.0	25.1	26.7
- No answer	5.6	16.7	41.5	3.6	19.2	6.7
--Tape recorder						
- A great deal	30.6	13.2	26.8	50.0	16.8	33.3
- Some	44.4	20.4	14.6	25.0	20.4	20.0
- Not at all	19.4	29.3	12.2	21.4	22.2	13.3
- I don't know	0.0	20.4	7.3	0.0	24.0	26.7
- No answer	5.6	16.7	39.0	3.6	17.2	6.7
--Phonograph						
- A great deal	22.2	13.2	12.2	42.9	10.2	20.0
- Some	41.7	20.2	22.0	28.6	18.6	26.7
- Not at all	30.6	27.7	14.6	21.4	28.1	13.3
- I don't know	0.0	20.7	7.3	0.0	25.7	33.3
- No answer	5.6	18.2	43.9	7.1	17.4	6.7
--Listening center						
- A great deal	16.7	4.3	17.1	14.3	2.4	20.0
- Some	13.9	9.1	12.2	28.6	6.6	13.3
- Not at all	50.0	35.2	9.8	42.9	34.7	6.7
- I don't know	13.9	31.2	17.1	7.1	34.1	46.7
- No answer	5.6	20.2	43.9	7.1	22.2	13.3
--Individual film strip previewer						
- A great deal	5.6	3.2	4.9	3.6	2.4	6.7
- Some	19.4	7.8	22.0	35.7	9.6	33.3
- Not at all	52.8	36.8	14.6	39.3	33.5	6.7
- I don't know	11.1	31.5	14.6	10.7	32.3	40.0
- No answer	11.1	20.7	43.9	10.7	22.2	13.4
--Flash cards and instructional games						
- A great deal	16.7	9.1	19.5	14.3	2.4	13.3
- Some	50.0	12.9	17.1	21.4	8.4	26.7
- Not at all	25.0	32.5	7.3	46.4	34.7	13.3
- I don't know	2.8	26.6	14.6	14.3	32.9	40.0
- No answer	5.6	18.8	41.5	3.6	21.6	6.7

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
20. (continued)						
--Screens						
- A great deal	33.3	10.5	19.5	28.6	7.8	6.7
- Some	30.6	18.3	24.4	35.7	21.0	40.0
- Not at all	19.4	25.8	7.3	25.0	25.7	13.3
- I don't know	2.8	26.9	9.8	7.1	26.3	33.3
- No answer	13.9	18.6	39.0	3.6	19.2	6.7
--Camera						
- A great deal	8.3	5.9	4.9	14.3	2.4	6.7
- Some	33.3	9.9	14.6	14.3	8.4	33.3
- Not at all	38.9	34.4	19.5	46.4	35.3	6.7
- I don't know	8.3	29.8	17.1	14.3	32.9	46.7
- No answer	11.1	19.9	43.9	10.7	21.0	6.7
--Portable tape recorder						
- A great deal	27.8	7.5	14.6	14.3	6.6	20.0
- Some	16.7	11.3	14.6	32.1	11.4	26.7
- Not at all	41.7	35.2	19.5	25.0	31.1	6.7
- I don't know	5.6	26.3	14.6	17.9	31.7	40.0
- No answer	8.3	19.7	36.6	10.7	19.2	6.7
--Multi-media library (film strips and records)						
- A great deal	16.7	7.5	9.8	25.0	6.6	26.7
- Some	19.4	10.5	19.5	42.9	15.0	20.0
- Not at all	36.1	32.0	9.8	25.0	29.3	6.7
- I don't know	11.1	29.8	17.1	3.6	26.3	40.0
- No answer	16.7	20.1	43.9	3.6	22.8	6.7
--Controlled reader						
- A great deal	27.8	7.8	9.8	7.1	5.4	20.0
- Some	25.0	10.8	19.5	10.7	5.4	13.3
- Not at all	30.6	31.7	12.2	46.4	33.5	6.7
- I don't know	8.3	30.4	17.1	21.4	33.5	53.3
- No answer	8.3	19.4	41.5	14.3	22.2	6.7
--Special reading film strip series						
- A great deal	13.9	5.6	4.9	3.6	4.8	20.0
- Some	33.3	8.1	17.1	14.3	4.2	13.3
- Not at all	27.8	33.6	9.8	42.9	34.7	6.7
- I don't know	13.9	32.3	24.4	28.6	33.5	53.3
- No answer	11.1	20.4	43.9	10.7	22.8	6.7

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A) %	N--372 (B) %	N-41 (C) %	N-28 (A) %	N-167 (B) %	N-15 (C) %
21. In your opinion, have the following auxiliary services helped you?						
--Reading center						
- A great deal	13.9	2.2	4.9	0.0	2.4	13.3
- Some	11.1	9.4	24.4	10.7	8.4	26.7
- Not at all	36.1	41.9	12.2	46.4	47.9	26.7
- I don't know	27.8	28.2	14.6	35.7	28.1	20.0
- No answer	11.1	18.2	43.9	7.1	13.2	13.3
--Paid aides						
- A great deal	33.3	10.2	31.7	32.1	7.2	20.0
- Some	16.7	10.8	17.1	3.6	7.2	26.7
- Not at all	36.1	42.7	9.8	39.3	50.9	13.3
- I don't know	8.3	19.4	7.3	17.9	24.0	26.7
- No answer	5.6	16.9	34.1	7.1	10.8	0.0
--ESEA study trips and paid admissions						
- A great deal	41.7	8.3	24.4	32.1	9.6	33.3
- Some	19.4	9.1	19.5	39.3	10.2	20.0
- Not at all	16.7	42.2	14.6	21.4	44.9	20.0
- I don't know	11.1	22.3	9.8	7.1	24.6	13.3
- No answer	11.1	18.0	31.7	0.0	10.8	13.3
--District resource teacher						
- A great deal	25.0	2.7	12.2	32.1	0.6	26.7
- Some	11.1	6.5	17.1	17.9	7.2	6.7
- Not at all	36.1	45.7	12.2	17.9	50.3	26.7
- I don't know	19.4	26.1	19.5	28.6	29.9	20.0
- No answer	8.3	19.1	39.0	3.6	12.0	20.0
--Community resource teacher						
- A great deal	13.9	3.5	17.1	14.3	0.6	13.3
- Some	13.9	6.7	9.8	3.6	4.8	13.3
- Not at all	41.7	43.3	12.2	28.6	52.1	20.0
- I don't know	22.2	28.2	17.1	5.0	29.9	26.7
- No answer	8.3	18.3	43.9	3.6	12.6	26.7

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
21. (continued)						
--Audio-visual resource teacher						
- A great deal	16.7	5.4	12.2	10.7	2.4	20.0
- Some	27.8	12.6	17.1	21.4	10.8	20.0
- Not at all	30.6	37.9	17.1	28.6	47.9	20.0
- I don't know	11.1	26.1	12.2	35.7	26.9	20.0
- No answer	13.9	18.0	41.5	3.6	12.0	20.0
--ESEA counselors (some schools do not have an ESEA counselor)						
- A great deal	13.9	3.8	19.5	28.6	3.6	26.7
- Some	13.9	9.7	9.8	25.0	10.8	40.0
- Not at all	19.4	33.3	7.3	17.9	41.3	6.7
- I don't know	19.4	32.3	12.2	21.4	29.3	6.7
- No answer	33.3	21.0	51.2	7.1	15.0	20.0
--In-service training and classroom visitations						
- A great deal	16.7	2.7	9.8	35.7	3.6	13.3
- Some	33.3	10.2	26.8	39.3	6.0	26.7
- Not at all	27.8	39.8	12.2	21.4	47.3	26.7
- I don't know	13.9	29.8	14.6	0.0	30.5	13.3
- No answer	8.3	17.5	36.6	3.6	12.6	20.0
--Substitute time allowed for in-service training and meetings?						
- A great deal	30.6	5.1	22.0	53.6	7.8	20.0
- Some	19.4	8.1	12.2	28.6	7.8	26.7
- Not at all	27.8	39.2	17.1	10.7	44.9	20.0
- I don't know	11.1	30.1	9.8	0.0	28.1	13.3
- No answer	11.1	17.5	39.0	7.1	11.4	20.0
22. Do you think the ESEA program has been of value to your school?						
- A great deal	72.2	31.2	51.2	78.6	29.9	33.3
- Some	16.7	35.5	26.8	17.9	36.5	40.0
- Not at all	2.8	5.4	4.9	0.0	6.6	6.7
- I don't know	5.6	20.4	0.0	0.0	22.2	6.7
- No answer	2.8	7.5	17.1	3.6	4.8	13.3

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36 (A)* %	N--372 (B)** %	N-41 (C)*** %	N-28 (A)* %	N-167 (B)** %	N-15 (C)*** %
23. Do you think the ESEA program should be:						
- Increased	77.8	58.3	70.7	89.3	55.7	60.0
- Remain the same	11.1	15.3	14.6	7.1	13.2	20.0
- Decreased	2.8	1.9	0.0	0.0	3.6	0.0
- Discontinued	2.8	3.8	2.4	0.0	7.2	6.7
- Changed in some way	2.8	3.0	0.0	3.6	3.6	6.7
- No answer	2.8	17.7	12.2	0.0	16.8	6.7
24. Check to indicate if you would like to know more about the ESEA program:						
- In the elementary school	22.2	13.4	22.0	35.7	11.4	26.7
- In the junior high school	50.0	54.8	39.0	3.6	2.4	6.7
- In the senior high school	2.8	1.3	0.0	32.1	52.1	26.7
- Community services	5.6	2.7	0.0	7.1	1.2	13.3
- Your school	2.8	8.6	0.0	0.0	19.2	6.7
- No answer	16.7	19.1	39.0	21.4	13.8	20.0
25. (JUNIOR HIGH SCHOOL ONLY) Please list in priority rank the ESEA Title I Programs you feel are most productive and beneficial to compensatory type students.				Question not asked at Sr. High level		
--2-1 Compensatory Reading						
- Priority 1st	91.7	73.4	80.5			
- 2nd	8.3	8.9	9.8			
- 3rd	0.0	1.1	0.0			
- 4th	0.0	0.8	0.0			
- No answer	0.0	15.9	9.8			
--2-3 Reading Resource						
- Priority 1st	0.0	2.2	41.5			
- 2nd	66.7	40.1	31.7			
- 3rd	13.9	21.5	9.8			
- 4th	5.6	7.3	0.0			
- No answer	13.9	29.0	17.1			

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

RESPONSES TO TEACHER QUESTIONNAIRE IN JUNIOR AND SENIOR HIGH SCHOOL, BY POSITION CATEGORY

	JUNIOR HIGH-(N-449)			SENIOR HIGH-(N-210)		
	N--36	N--372	N-41	N-28	N-167	N-15
	(A)*	(B)**	(C)***	(A)*	(B)**	(C)***
	%	%	%	%	%	%
25. (continued)						
--2-5 Compensatory Social Worker						
- Priority 1st	2.8	4.0	7.3			
- 2nd	5.6	10.5	19.5			
- 3rd	50.0	22.8	22.0			
- 4th	22.2	27.7	24.4			
- No answer	19.4	35.0	26.8			
--2-7 Compensatory Gifted Program						
- Priority 1st	5.6	5.9	2.4			
- 2nd	5.6	13.7	12.2			
- 3rd	19.4	18.8	19.5			
- 4th	50.0	26.6	34.1			
- No answer	19.4	34.9	31.7			

---

* ESEA TEACHERS

** TEACHERS (NO ESEA CLASSES)

*** COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

SECTION B
JUNIOR HIGH SCHOOL - ESEA TEACHERS

Factors:	How Much of a Problem							Time Needed						
	Very Important Problem 1	2	3	4	No Problem At All 5	No Answer	Median Rating	Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	38.9%	27.8%	22.2%	5.6%	2.8%	2.8%	2.35	0.0%	13.9%	50.0%	22.2%	11.1%	2.8%	3.69
2. Maintaining discipline and control within the classroom	19.4	13.9	19.4	22.2	25.0	0.0	3.86	22.2	33.3	25.0	8.3	8.3	2.8	2.79
3. Motivating children; getting them interested and participating	36.1	22.2	16.7	13.9	8.3	2.8	2.56	8.3	8.3	19.4	33.3	22.2	8.3	4.29
4. Finding content appropriate to the children's needs	47.2	13.9	22.2	8.3	5.6	2.8	2.10	5.6	11.1	36.1	25.0	19.4	2.8	3.88
5. Finding time to do all the things other than teaching that have to be done	52.8	8.3	22.2	5.6	5.6	5.6	1.89	5.6	13.9	22.2	27.8	22.2	8.3	4.15
6. Evaluating pupil performance and assigning grades	11.1	11.1	38.9	22.2	11.1	5.6	3.64	11.1	19.4	41.7	13.9	5.6	8.3	3.37
7. Coping with interruptions of classroom routine	5.6	5.6	27.8	19.4	38.9	2.8	4.50	50.0	19.4	19.4	5.6	0.0	5.6	1.94
8. Getting supplies, instructional materials, or special services when I need them	22.2	11.1	16.7	13.9	33.3	2.8	3.92	30.6	16.7	36.1	8.3	2.8	5.6	3.00

SECTION B
JUNIOR HIGH SCHOOL - TEACHERS (NO ESEA CLASSES)

Factors:	How Much of a Problem							Time Needed						
	Very Important Problem 1	2	3	4	No Problem At All 5	No Answer	Median Rating	Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	34.7%	20.4%	21.8%	6.5%	9.1%	7.5%	2.57	7.5%	17.2%	41.1%	16.1%	8.3%	9.7%	3.50
2. Maintaining discipline and control within the classroom	30.4	11.3	19.1	14.8	16.9	7.5	3.24	14.0	23.1	24.5	19.4	9.7	9.4	3.34
3. Motivating children; getting them interested and participating	36.8	20.2	17.5	10.8	7.5	7.3	2.47	5.4	15.3	29.0	25.0	15.3	9.9	3.84
4. Finding content appropriate to the children's needs	39.8	16.7	16.9	7.8	10.5	8.3	2.36	6.7	16.9	30.9	23.7	11.3	10.5	3.68
5. Finding time to do all the things other than teaching that have to be done	34.9	19.1	25.8	6.2	5.9	8.1	2.58	6.2	14.2	37.4	22.0	9.9	10.2	3.65
6. Evaluating pupil performance and assigning grades	16.1	18.0	28.5	15.9	14.0	7.5	3.42	8.9	21.0	42.2	14.8	3.8	9.4	3.37
7. Coping with interruptions of classroom routine	14.8	14.2	22.3	21.5	19.4	7.8	3.77	24.7	22.8	29.6	9.9	3.2	9.6	2.89
8. Getting supplies, instructional materials, or special services when I need them	16.9	11.8	18.0	19.1	26.3	7.8	3.96	26.3	22.8	25.3	9.9	5.1	10.4	2.81

SECTION B
JUNIOR HIGH SCHOOL - COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

Factors:	How Much of a Problem							Time Needed						
	Very Important Problem 1	2	3	4	No Problem At All 5	No Answer	Median Rating	Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	26.8%	7.3%	0.0%	7.3%	0.0%	58.5%	1.77	0.0%	4.9%	22.0%	7.3%	4.9%	61.0%	3.67
2. Maintaining discipline and control within the classroom	17.1	2.4	9.8	4.9	4.9	61.0	3.00	4.9	7.3	12.2	9.8	2.4	63.4	3.50
3. Motivating children; getting them interested and participating	19.5	7.3	2.4	4.9	4.9	61.0	2.00	4.9	4.9	12.2	12.2	2.4	63.4	3.70
4. Finding content appropriate to the children's needs	12.2	9.8	9.8	0.0	4.9	63.4	2.62	0.0	2.4	19.5	7.3	4.9	65.9	3.75
5. Finding time to do all the things other than teaching that have to be done	17.1	9.8	4.9	2.4	2.4	63.4	2.12	2.4	4.9	9.8	9.8	7.3	65.9	4.00
6. Evaluating pupil performance and assigning grades	7.3	9.8	4.9	7.3	9.8	61.0	3.50	7.3	12.2	9.8	4.9	0.0	65.9	2.80
7. Coping with interruptions of classroom routine	2.4	2.4	7.3	14.6	9.8	63.4	4.42	9.8	9.8	12.2	2.4	0.0	65.9	2.75
8. Getting supplies, instructional materials, or special services when I need them	0.0	12.2	7.3	4.9	14.6	61.0	3.00	12.2	7.3	12.2	4.9	0.0	63.4	2.83

SECTION B
SENIOR HIGH - ESEA TEACHERS

Factors:	How Much of a Problem							Time Needed						
	Very Important Problem 1	2	3	4	No Problem At All 5	No Answer	Median Rating	Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	39.3%	28.6%	32.1%	0.0%	0.0%	0.0%	2.38	3.6%	10.7%	42.9%	32.1%	10.7%	0.0%	3.83
2. Maintaining discipline and control within the classroom	10.7	21.4	21.4	0.0	42.9	3.6	3.75	39.3	25.0	14.3	10.7	7.1	3.6	2.36
3. Motivating children; getting them interested and participating	75.0	7.1	7.1	7.1	3.6	0.0	1.67	3.6	10.7	28.6	21.4	35.7	0.0	4.33
4. Finding content appropriate to the children's needs	50.0	21.4	14.3	7.1	7.1	0.0	2.00	10.7	10.7	32.1	17.9	25.0	3.6	3.83
5. Finding time to do all the things other than teaching that have to be done	32.1	28.6	21.4	10.7	3.6	3.6	2.56	3.6	14.3	53.6	14.3	7.1	7.1	3.53
6. Evaluating pupil performance and assigning grades	10.7	10.7	39.3	14.3	21.4	3.6	3.68	7.1	28.6	50.0	10.7	0.0	3.6	3.25
7. Coping with interruptions of classroom routine	14.3	17.9	10.7	21.4	32.1	3.6	4.25	35.7	32.1	10.7	14.3	3.6	3.6	2.39
8. Getting supplies, instructional materials, or special services when I need them	21.4	0.0	17.9	21.4	35.7	3.6	4.42	28.6	32.1	25.0	7.1	3.6	3.6	2.61

SECTION B
SENIOR HIGH - TEACHERS (NO ESEA CLASSES)

Factors:	How Much of a Problem: Very Important Problem 1	2	3	4	No Problem At All 5	No Answer	Median Rating	Time Needed: Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	34.7%	28.1%	21.6%	6.0%	5.4%	4.2%	2.47	6.6%	12.6%	47.3%	19.2%	9.6%	4.8%	3.60
2. Maintaining discipline and control within the classroom	19.8	13.2	22.8	22.2	19.2	3.0	3.68	21.0	29.3	25.1	12.6	7.2	4.8	2.91
3. Motivating children; getting them interested and participating	49.7	20.4	12.6	10.2	5.4	1.8	1.99	3.0	13.2	19.2	32.9	26.3	5.4	4.36
4. Finding content appropriate to the children's needs	37.1	26.3	15.6	9.0	7.8	4.2	2.41	8.4	11.4	32.9	22.8	18.6	6.0	3.83
5. Finding time to do all the things other than teaching that have to be done	41.3	21.0	20.4	7.8	6.0	3.6	2.33	9.6	9.0	37.7	22.8	15.0	6.0	3.75
6. Evaluating pupil performance and assigning grades	15.0	26.3	34.0	16.8	15.0	3.0	3.30	7.2	18.0	49.7	15.6	5.4	4.2	3.46
7. Coping with interruptions of classroom routine	20.4	21.6	26.9	20.4	8.4	2.4	3.26	13.2	28.1	33.5	16.2	4.8	4.2	3.20
8. Getting supplies, instructional materials, or special services when I need them	22.2	12.6	22.2	20.4	19.8	3.0	3.62	25.1	22.8	28.1	13.8	5.4	4.8	2.99

SECTION B
SENIOR HIGH - COUNSELORS, ADMINISTRATORS, OR POSITION UNKNOWN

Factors:	How Much of a P oblem							Time Needed						
	Very Important Problem 1	2	3	4	oblem All 5	No Answer	Median Rating	Virtually No Time 1	2	3	4	Practically All My Time 5	No Answer	Median Rating
1. Figuring out how to provide for individual differences among pupils	46.7%	6.7%	0.0%	0.0%	0.0%	46.7%	1.57	13.3%	13.3%	13.3%	13.3%	0.0%	46.7%	3.00
2. Maintaining discipline and control within the classroom	6.7	6.7	13.3	13.3	13.3	46.7	4.00	6.7	13.3	26.7	0.0	6.7	46.7	3.25
3. Motivating children; getting them interested and participating	40.0	6.7	0.0	6.7	0.0	46.7	1.67	0.0	6.7	13.3	26.7	6.7	46.7	4.25
4. Finding content appropriate to the children's needs	33.3	6.7	6.7	0.0	6.7	46.7	1.80	0.0	6.7	20.0	20.0	6.7	46.7	4.00
5. Finding time to do all the things other than teaching that have to be done	20.0	0.0	20.0	6.7	6.7	46.7	3.33	6.7	6.7	20.0	13.3	6.7	46.7	3.67
6. Evaluating pupil performance and assigning grades	20.0	13.3	20.0	0.0	0.0	46.7	2.50	6.7	0.0	13.3	20.0	13.3	46.7	4.33
7. Coping with interruptions of classroom routine	13.3	26.7	13.3	0.0	0.0	46.7	2.50	20.0	13.3	20.0	0.0	0.0	46.7	2.50
8. Getting supplies, instructional materials, or special services when I need them	13.3	6.7	13.3	6.7	13.3	46.7	3.50	26.7	6.7	13.3	0.0	6.7	46.7	2.00

Appendix D

SEPTEMBER-FEBRUARY AND SEPTEMBER-MAY CHANGES IN READING ACHIEVEMENT TEST SCORES FROM GRADE HIGH 4 THROUGH GRADE 12

Table D-1

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN STANFORD READING TEST (INTERMEDIATE I) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE HIGH 4

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	3.7 or more	—	12	13	4	—	29	4.0
	2.8 - 3.6	1	28	36	10	1	76	4.2
	2.7 or less	0	46	62	14	3	125	4.3
	Total	1	86	111	28	4	230	4.2
Reading	3.7 or more	—	—	—	—	—	—	—
	2.8 - 3.6	—	3	3	—	—	6	3.0
	2.7 or less	3	30	39	15	1	88	4.4
	Total	3	33	42	15	1	94	4.3
Other services	3.7 or more	—	—	—	—	—	—	—
	2.8 - 3.6	1	4	5	—	—	10	3.0
	2.7 or less	1	12	7	2	1	23	2.0
	Total	2	16	12	2	1	33	2.2
Both reading and other services	3.7 or more	—	—	—	—	—	—	—
	2.8 - 3.6	—	—	2	—	—	2	5.5
	2.7 or less	—	14	7	—	—	21	1.0
	Total	—	14	9	—	—	23	1.4
Total over all levels of participation	3.7 or more	—	12	13	4	—	29	4.0
	2.8 - 3.6	2	35	46	10	1	94	4.1
	2.7 or less	4	102	115	31	5	257	4.0
	Total	6	149	174	45	6	380	4.0

Table D-2

SEPTEMBER 1966 TO MAY 1967 CHANGES IN STANFORD READING TEST (INTERMEDIATE I) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE HIGH 4

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	3.7 or more	1	4	12	16	1	34	9.0
	2.8 - 3.6	0	13	44	19	7	83	6.5
	2.7 or less	1	23	47	29	9	109	6.6
	Total	2	40	103	64	17	226	6.8
Reading	3.7 or more	—	—	—	2	—	2	11.5
	2.8 - 3.6	2	3	5	1	0	11	3.5
	2.7 or less	2	23	29	19	2	75	5.2
	Total	4	26	34	22	2	88	5.0
Other services	3.7 or more	—	—	—	—	1	1	19.0
	2.8 - 3.6	0	2	1	0	1	4	3.0
	2.7 or less	0	0	6	2	1	9	7.2
	Total	0	2	7	2	3	14	7.0
Both reading and other services	3.7 or more	—	—	—	—	—	0	—
	2.8 - 3.6	0	0	1	1	0	2	9.0
	2.7 or less	0	9	4	6	4	23	6.4
	Total	0	9	5	7	4	25	6.9
Total over all levels of participation	3.7 or more	1	4	12	18	2	37	9.4
	2.8 - 3.6	2	18	51	21	8	100	5.9
	2.7 or less	3	55	86	56	16	216	6.1
	Total	6	77	149	95	26	353	6.4

Table D-3

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN STANFORD READING TEST (INTERMEDIATE I & II) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 5*

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	4.1 or more	3	18	18	22	4	65	6.5
	2.9 - 4.0	8	45	49	38	13	153	5.4
	2.8 or less	0	23	38	16	22	99	6.9
	Total	11	86	105	76	39	317	6.1
Reading	4.1 or more	0	0	2	1	1	4	9.0
	2.9 - 4.0	8	21	17	7	1	54	2.2
	2.8 or less	3	17	28	14	10	72	6.0
	Total	11	38	47	22	12	130	4.7
Other services	4.1 or more	0	1	1	3	0	5	3.8
	2.9 - 4.0	5	11	5	2	1	24	3.7
	2.8 or less	0	1	9	3	4	17	7.8
	Total	5	13	15	8	5	46	4.7
Both reading and other services	4.1 or more	0	0	0	0	2	2	19.0
	2.9 - 4.0	2	7	4	0	0	13	0.2
	2.8 or less	1	3	4	1	0	9	3.6
	Total	3	10	8	1	2	24	2.2
Total over all levels of participation	4.1 or more	3	19	21	26	7	76	7.3
	2.9 - 4.0	23	84	75	47	15	244	4.0
	2.8 or less	4	44	79	34	36	197	6.5
	Total	30	147	175	107	58	517	5.3

---

* Low 5 receiving Intermediate I Battery; high 5 receiving Intermediate II Battery.

Table D-4

SEPTEMBER 1966 TO MAY 1967 CHANGES IN STANFORD READING TEST (INTERMEDIATE I & II) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 5

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	4.1 or more	2	7	11	10	3	33	6.8
	2.9 - 4.0	11	31	43	26	20	131	5.8
	2.8 or less	3	14	34	18	8	77	6.4
	Total	16	52	88	54	31	241	6.2
Reading	4.1 or more	0	1	0	3	1	5	11.5
	2.9 - 4.0	4	13	18	7	2	44	4.5
	2.8 or less	2	11	30	16	2	61	6.1
	Total	6	25	48	26	5	110	5.5
Other services	4.1 or more	1	0	0	0	0	1	-8.0
	2.9 - 4.0	2	3	3	0	2	10	3.0
	2.8 or less	0	3	3	1	1	8	4.7
	Total	3	6	6	1	3	19	3.4
Both reading and other services	4.1 or more	0	1	0	1	0	2	9.0
	2.9 - 4.0	0	4	3	0	1	8	3.0
	2.8 or less	0	2	5	2	1	10	6.2
	Total	0	7	8	3	2	20	4.9
Total over all levels of participation	4.1 or more	3	9	11	14	4	41	7.4
	2.9 - 4.0	17	51	67	33	25	193	5.1
	2.8 or less	5	30	72	37	12	156	6.2
	Total	25	90	150	84	41	390	5.6

Table D-5

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN STANFORD READING TEST (INTERMEDIATE II) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 6

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	4.6 or more	11	26	43	29	24	133	6.8
	3.0 - 4.5	26	63	93	52	33	267	5.4
	2.9 or less	1	11	13	17	12	54	9.6
	Total	38	100	149	98	69	454	6.2
Reading	4.6 or more	3	3	1	0	0	7	-3.1
	3.0 - 4.5	8	31	23	7	4	73	2.4
	2.9 or less	1	2	19	5	5	32	6.8
	Total	12	36	43	12	9	112	3.9
Other services	4.6 or more	2	2	2	2	0	8	3.0
	3.0 - 4.5	2	18	8	12	4	44	4.2
	2.9 or less	0	1	3	0	4	8	15.0
	Total	4	21	13	14	8	60	4.5
Both reading and other services	4.6 or more	1	1	0	1	0	3	-1.0
	3.0 - 4.5	5	7	2	7	2	23	2.4
	2.9 or less	0	1	2	1	2	6	9.0
	Total	6	9	4	9	4	32	4.2
Total over all levels of participation	4.6 or more	17	32	46	32	24	151	6.0
	3.0 - 4.5	41	119	126	78	43	407	4.7
	2.9 or less	2	15	37	23	23	100	8.2
	Total	60	166	209	133	90	658	5.5

Table D-6

SEPTEMBER 1966 TO MAY 1967 CHANGES IN STANFORD READING TEST (INTERMEDIATE II) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 6

Participation in ESEA Program	Grade Equivalent Scores from September Testing	Months Change Between Testing Periods					Total Number Pupils	Median Gain
		-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More		
No participation in ESEA Program	4.6 or more	11	20	38	29	20	118	7.1
	3.0 - 4.5	13	47	73	44	37	214	7.5
	2.9 or less	0	2	10	9	15	36	12.6
	Total	24	69	121	82	72	368	7.2
Reading	4.6 or more	1	0	2	1	1	5	7.2
	3.1 - 4.5	3	13	15	4	4	39	4.2
	2.9 or less	1	1	2	2	4	10	11.5
	Total	5	14	19	7	9	54	5.1
Other services	4.6 or more	1	1	0	1	0	3	-1.0
	3.1 - 4.5	5	9	11	4	2	31	3.7
	2.9 or less	0	1	0	1	1	3	11.5
	Total	6	11	11	6	3	37	3.7
Both reading and other services	4.6 or more	—	—	—	—	—	—	—
	3.1 - 4.5	1	3	1	3	0	8	3.0
	2.9 or less	0	0	1	2	0	3	10.2
	Total	1	3	2	5	0	11	7.2
Total over all levels of participation	4.6 or more	13	21	40	31	21	126	7.1
	3.1 - 4.5	22	72	100	55	43	292	5.6
	2.9 or less	1	4	13	14	20	52	12.0
	Total	36	97	153	100	84	470	6.7

Table D-7

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN GATES-MACGINITIE (SURVEY D) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE LOW 7

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	5.1 or more	6	7	8	9	19	49	10.4
	3.1 - 5.0	31	38	30	26	6	141	3.2
	3.0 or less	3	5	11	4	7	30	6.4
	Total	40	50	49	39	42	220	5.1
One or two compensatory classes in year	5.1 or more	3	1	0	0	0	4	-6.7
	3.1 - 5.0	10	5	2	5	0	22	-2.8
	3.0 or less	1	1	3	0	1	6	4.6
	Total	14	7	5	5	1	33	-2.3
More than two compensatory classes in year	5.1 or more	1	0	1	0	0	2	3.0
	3.1 - 5.0	13	7	3	2	1	26	-4.0
	3.0 or less	0	2	1	1	0	4	3.0
	Total	14	9	5	3	1	32	-2.6
Total over all levels of participation	5.1 or more	10	8	9	9	19	55	9.3
	3.1 - 5.0	54	50	35	33	17	189	1.5
	3.0 or less	4	8	15	5	8	40	5.7
	Total	68	66	59	47	44	284	3.7

Table D-8

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY D) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE LOW 7

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	5.1 or more	4	5	8	12	26	55	14.1
	3.1 - 5.0	6	10	13	4	9	42	4.9
	3.0 or less	0	1	0	2	1	4	11.5
	Total	10	16	21	18	36	101	10.0
One or two compensatory classes in year	5.3 or more	3	0	5	2	2	12	6.2
	3.1 - 5.2	12	13	6	6	3	40	0.0
	3.0 or less	0	1	4	0	1	6	5.5
	Total	15	14	15	8	6	58	3.0
More than two compensatory classes in year	5.3 or more	0	0	1	0	0	1	5.5
	3.1 - 5.2	0	5	1	4	3	13	9.6
	3.0 or less	0	1	2	1	1	5	7.2
	Total	0	6	4	5	4	19	8.1
Total over all levels of participation	5.3 or more	7	5	14	14	28	68	12.0
	3.1 - 5.2	18	28	20	14	15	95	3.4
	3.0 or less	0	3	6	3	3	15	7.2
	Total	25	36	40	31	46	178	6.9

Table D-9

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN GATES-MACGINITIE (SURVEY D) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE HIGH 7

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores from September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	5.3 or more	44	44	53	51	80	272	8.3
	3.1 - 5.2	40	72	99	49	46	306	5.1
	3.0 or less	2	14	16	9	8	49	5.7
	Total	86	130	168	109	134	627	6.1
One or two compensatory classes in year	5.3 or more	4	1	0	1	0	6	-6.0
	3.1 - 5.2	0	4	2	6	1	13	9.4
	3.0 or less	0	1	0	3	2	6	12.7
	Total	4	6	2	10	3	25	9.2
More than 2 compensatory classes in year	5.3 or more	6	4	5	5	2	22	4.0
	3.1 - 5.2	11	12	15	8	4	50	3.7
	3.0 or less	1	9	7	5	3	25	4.8
	Total	18	25	27	18	9	97	4.0
Total over all levels of participation	5.3 or more	54	49	58	57	82	300	7.7
	3.1 - 5.2	51	88	116	63	51	369	5.0
	3.0 or less	3	24	23	17	13	80	5.9
	Total	108	161	197	137	146	749	5.7

Table D-10

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY D) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE HIGH 7

Participation in ESEA Program	Grade Equivalent Scores From September Testing	Months Change Between Testing Periods: -5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	5.3 or more	18	22	20	25	43	128	9.8
	3.1 - 5.2	4	18	34	12	16	84	6.1
	3.0 or less	0	2	6	0	6	14	7.8
	Total	22	42	60	37	65	226	7.7
1 or 2 compensatory classes in year	5.3 or more	1	7	11	4	24	47	15.0
	3.1 - 5.2	7	30	17	12	7	73	2.9
	3.0 or less	0	5	11	2	6	24	6.4
	Total	8	42	39	18	37	144	5.9
More than 2 compensatory classes in year	5.3 or more	0	1	0	1	2	4	15.0
	3.1 - 5.2	2	4	4	5	9	24	11.0
	3.0 or less	0	0	1	0	1	2	15.0
	Total	2	5	5	6	12	30	11.5
Total over all levels of participation	5.3 or more	19	30	31	30	69	179	10.6
	3.1 - 5.2	13	52	55	29	32	181	5.3
	3.0 or less	0	7	18	2	13	40	7.0
	Total	32	89	104	61	114	400	7.3

Table D-11

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN GATES-MACGINITIE (SURVEY D) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN LOW AND HIGH 8

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores From September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	5.7 or more	2	1	3	1	3	10	6.7
	3.1 - 5.6	14	16	18	5	6	59	2.8
	3.0 or less	1	2	3	1	1	8	4.7
	Total	17	19	24	7	10	77	3.5
1 or 2 compensatory classes in year	5.7 or more	2	2	0	1	1	6	-1.0
	3.1 - 5.6	5	3	1	1	0	10	-4.0
	3.0 or less	0	0	0	1	0	1	11.5
	Total	7	5	1	3	1	17	-2.2
More than 2 compensatory classes in year	5.7 or more	3	1	0	2	3	9	10.2
	3.1 - 5.6	12	26	21	9	6	74	2.7
	3.0 or less	1	11	7	4	1	24	3.0
	Total	16	38	28	15	10	107	2.9
Total over all levels of participation	5.7 or more	7	4	3	4	7	25	5.5
	3.1 - 5.6	31	45	40	15	12	143	2.2
	3.0 or less	2	13	10	6	2	33	3.8
	Total	40	62	53	25	21	201	2.8

Table D-12

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY D) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 8

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores From September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA program	5.7 or more	4	4	3	2	11	24	11.5
	3.1 - 5.6	4	4	4	1	3	16	3.0
	3.0 or less	0	0	1	0	2	3	17.0
	Total	8	8	8	3	16	43	6.8
1 or 2 compensatory classes in year	5.7 or more	2	2	2	1	2	9	4.2
	3.1 - 5.6	4	8	6	3	2	23	2.5
	3.0 or less	1	1	2	0	0	4	3.0
	Total	7	11	10	4	4	36	3.0
More than 2 compensatory classes in year	5.7 or more	4	3	2	2	6	17	7.2
	3.1 - 5.6	5	5	7	5	8	30	7.0
	3.0 or less	0	1	0	0	0	1	-1.0
	Total	9	9	9	7	14	48	6.7
Total over all levels of participation	5.7 or more	10	9	7	5	19	50	8.0
	3.1 - 5.6	13	17	17	9	13	69	4.3
	3.0 or less	1	2	3	0	2	8	4.7
	Total	24	28	27	14	34	127	5.1

Table D-13

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN GATES-MACGINITIE (SURVEY E) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 9

Participation in ESEA Program	Grade Equivalent Scores From September Testing	Months Change Between Testing Periods: -5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA program	6.2 or more	5	2	4	2	2	15	3.6
	3.1 - 6.1	3	6	7	5	4	25	5.5
	3.0 or less	0	1	0	0	1	2	15.0
	Total	8	9	11	7	7	42	4.9
1 or 2 compensatory classes in year	6.2 or more	1	2	2	2	0	7	4.2
	3.1 - 6.1	8	17	11	8	13	57	4.6
	3.0 or less	0	2	2	0	1	5	4.2
	Total	9	21	15	10	14	69	4.5
More than 2 compensatory classes in year	6.2 or more	0	0	0	0	0	0	--
	3.1 - 6.1	1	3	2	0	0	6	0.3
	3.0 or less	0	1	0	0	0	1	-1.0
	Total	1	4	2	0	0	7	0.0
Total over all levels of participation	6.2 or more	6	4	6	4	2	22	3.9
	3.1 - 6.1	12	26	20	13	17	88	4.2
	3.0 or less	0	4	2	0	2	8	3.0
	Total	18	34	28	17	21	118	4.2

Table D-14

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY E) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADES LOW AND HIGH 9

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores From September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	6.2 or more	8	3	1	3	6	21	1.7
	3.1 - 6.1	2	8	5	1	6	22	4.0
	3.0 or less	0	0	0	0	3	3	19.0
	Total	10	11	6	4	15	46	4.7
1 or 2 compensatory classes in year	6.2 or more	9	4	4	4	3	24	1.0
	3.1 - 6.1	4	12	15	11	10	52	6.8
	3.0 or less	0	2	5	1	1	9	5.5
	Total	13	18	24	16	14	85	5.4
More than 2 compensatory classes in year	6.2 or more	0	0	0	0	0	0	--
	3.1 - 6.1	3	3	4	0	1	11	1.7
	3.0 or less	0	0	0	0	0	0	--
	Total	3	3	4	0	1	11	1.7
Total over all levels of participation	6.2 or more	17	7	5	7	9	45	1.2
	3.1 - 6.1	9	23	24	12	17	85	5.2
	3.0 or less	0	2	5	1	4	12	6.1
	Total	26	32	34	20	30	142	4.9

Table D-15

SEPTEMBER 1966 TO FEBRUARY 1967 CHANGES IN GATES-MACGINITIE (SURVEY E) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE 10

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores From September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	6.8 or more	2	2	0	0	1	5	-2.5
	3.6 - 6.7	5	7	4	11	9	36	9.4
	3.5 or less	0	2	0	3	2	7	11.5
	Total	7	11	4	14	12	48	9.7
1 or 2 compensatory classes in year	6.8 or more	1	3	1	1	0	6	0.4
	3.6 - 6.7	5	1	0	1	2	9	-4.8
	3.5 or less	1	0	1	0	1	3	5.5
	Total	7	4	2	2	3	18	-1.0
More than 2 compensatory classes in year	6.8 or more	0	1	0	0	0	1	-1.0
	3.6 - 6.7	1	5	1	0	4	11	2.2
	3.5 or less	1	2	1	4	4	12	11.5
	Total	2	8	2	4	8	24	9.0
Total over all levels of participation	6.8 or more	3	6	1	1	1	12	-1.0
	3.6 - 6.7	11	13	5	2	15	56	7.6
	3.5 or less	2	4	2	7	7	22	11.2
	Total	16	23	8	20	23	90	7.2

Table D-16

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY E) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE 10

Participation in ESEA Program	Grade Equivalent Scores From September Testing	Months Change Between Testing Periods					Total Number Pupils	Median Gain
		-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More		
No participation in ESEA Program	6.8 or more	11	4	3	2	4	24	-2.5
	3.6 - 6.7	14	17	10	11	12	64	3.5
	3.5 or less	0	1	2	2	6	11	15.7
	Total	25	22	15	15	22	99	3.8
1 or 2 compensatory classes in year	6.8 or more	3	1	3	0	5	12	6.7
	3.6 - 6.7	8	5	10	7	9	39	6.6
	3.5 or less	1	1	0	1	4	7	15.8
	Total	12	7	13	8	18	58	7.4
More than 2 compensatory classes in year	6.8 or more	2	1	1	2	0	6	3.0
	3.6 - 6.7	3	6	6	3	4	22	4.7
	3.5 or less	1	1	2	1	4	9	11.5
	Total	6	8	9	6	8	37	5.5
Total over all levels of participation	6.8 or more	16	6	7	4	9	42	1.7
	3.6 - 6.7	25	28	26	21	25	125	4.8
	3.5 or less	2	3	4	4	14	27	15.3
	Total	43	37	37	29	48	194	5.3

Table D-17

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY E) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE 11

Participation in ESEA Program	Grade Equivalent Scores From September Testing	Months Change Between Testing Periods: -5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	7.3 or more	2	1	3	1	3	10	6.7
	3.6 - 7.2	8	17	7	11	9	52	3.7
	3.5 or less	--	--	--	1	--	1	11.5
	Total	10	18	10	13	12	63	4.8
1 or 2 compensatory classes in year	7.3 or more	3	1	2	2	0	8	3.0
	3.6 - 7.2	9	10	1	3	6	29	-0.6
	3.5 or less	--	1	1	--	4	6	17.0
	Total	12	12	4	5	10	43	1.3
More than 2 compensatory classes in year	7.3 or more	6	0	3	0	1	10	-5.4
	3.6 - 7.2	15	24	15	10	23	87	4.5
	3.5 or less	--	4	2	1	6	13	11.5
	Total	21	28	20	11	30	110	4.5
Total over all levels of participation	7.3 or more	11	2	8	3	4	28	3.6
	3.6 - 7.2	32	51	23	24	38	168	3.2
	3.5 or less	--	5	3	2	10	20	15.0
	Total	43	58	34	29	52	216	4.0

Table D-18

SEPTEMBER 1966 TO MAY 1967 CHANGES IN GATES-MACGINITIE (SURVEY E) GRADE EQUIVALENT SCORES FOR A SAMPLE OF PUPILS IN GRADE 12

		Months Change Between Testing Periods						
Participation in ESEA Program	Grade Equivalent Scores From September Testing	-5 or More	-4 to +2	+3 to +8	+9 to +14	+15 or More	Total Number Pupils	Median Gain
No participation in ESEA Program	7.8 or more	3	3	0	0	0	6	-4.0
	3.6 - 7.7	13	3	5	3	3	27	-3.0
	3.5 or less	--	--	--	--	1	1	19.0
	Total	16	6	5	3	4	34	-3.0
1 or 2 compensatory classes in year	7.8 or more	1	1	1	0	1	4	3.0
	3.6 - 7.7	9	6	9	1	4	29	2.3
	3.5 or less	--	1	--	--	--	1	-1.0
	Total	10	8	10	1	5	34	2.0
More than 2 compensatory classes in year	7.8 or more	4	1	2	1	0	8	-4.0
	3.6 - 7.7	15	16	12	3	15	61	2.8
	3.5 or less	--	--	1	1	1	3	11.5
	Total	19	17	15	5	16	72	3.0
Total over all levels of participation	7.8 or more	8	5	3	1	1	18	-2.8
	3.6 - 7.7	37	25	26	7	22	117	1.9
	3.5 or less	--	1	1	1	2	5	11.5
	Total	45	31	30	9	25	140	1.4

Appendix E

QUESTIONNAIRES TO PROJECT PERSONNEL

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

June 9, 1967

To: ESEA Elementary Compensatory and Ratio Teachers

From: Thomas C. Thomas, Stanford Research Institute

During the past year we have been able to learn a great deal about the operation of compensatory classes throughout ESEA target and receiving schools. We have also become increasingly aware of the differences in need (in language handicap, cultural background, etc.) from school to school, as well as from pupil to pupil. We now need to learn from you what needs are found in your particular school and how you treat them. We hope to elicit, by means of the attached questionnaire, your thoughts about what needs exist in your classes, how they are met, and with what success they are met. From this we should be able to make an analysis of the ways in which varying needs throughout the ESEA Compensatory Program are being met and perhaps ways in which they may be better met in the coming year.

Please return your questionnaire in the attached envelope to Mrs. Marjorie Pulsifer through the school pick-up by June 16. We hope you will identify yourself by signing your letter. Whether or not you choose to sign it, you may be assured that your comments will be treated as confidential. No individual will be identified by name or title in summaries of comments that may be prepared. The purpose of this request is to get your ideas about how to improve the program, including how best to evaluate it; please be as candid and as constructively critical as possible.

SRI/SFUSD
6336 (June 1967)
Comp

1. Please describe the types of students you have in your compensatory classes. One method of doing this would be to indicate the approximate number of students in each of the following categories. (These categories were developed by some compensatory teachers.) However, if you feel another type of description will make the picture more complete or better, please use it.

Number of Students		Category of Student
______	a)	has average ability but misdeveloped skills
______	b)	is a slow learner who is consistently passed by his class
______	c)	has average ability but comes from a home in which English is a second language
______	d)	is foreign born and English is his second language
______	e)	has emotional problems which interfere with his behavior, and therefore his promotion and grouping
______	f)	has extra-curricular problems causing frequent absences and consequent academic problems
		Other categories:
______		______________________________
______		______________________________
______		______________________________

Additional Description:

____

____

____

____

____

____

2. Based upon the types of students in your compensatory classes, what are your objectives? Do your objectives differ depending upon the type of student?

____

____

____

____

____

____

____

3. What methods do you employ to reach your objectives? Please be specific and give examples. Do your methods differ between your various compensatory classes due to age, type of problem, or other factors? If so, please explain your strategy.

____

____

____

____

____

____

____

____

____

____

4. Have any classroom teachers evidenced interest to you in using any of these methods? If so, please elaborate.

____

____

____

____

____

____

5. How many of your students should be able to effectively participate in the regular classroom next year--that is "graduate" from your compensatory class? If you were able to "graduate" any of your students in the current year, how did they differ from your other students? Do you expect the "average" student in your compensatory class will ever be fully ready to participate in the normal school program, given the present level of special help you're able to give him?

____

____

____

____

____

____

____

____

____

____

____

____

6. Do you feel that the number of students in a compensatory class and/or the length of the class should be changed? Take into consideration that any such change will directly effect the number of students to which compensatory education can be given.

7. Do any of your students need other special services to make the compensatory classes more effective -- for example, home contacts by a community teacher or special counseling? Are these services presently available to these students?

8. Would teacher aides or any special equipment or supplies not presently available be of value to you? If so, please describe.

9. Please describe the situations which led to your greatest amount of success with individual students or group of students this year.

10. Please describe the situations which led to your least amount of success with individual students or group of students this year.

11. In the questionnaire administered at the end of the 1966 spring term, compensatory teachers listed a number of problems. Some of these are listed below. If your compensatory experience is only during the current year, please proceed to question 12. If you were a compensatory teacher during the 1966 spring term, please indicate the extent to which each of the below listed areas was and still is a problem. If you care to elaborate on any item please do so.

a) Need for more homogeneous grouping by reading ability rather than age.

___ was not a problem in 1966 spring term
___ was not a problem in 1966 spring term but is this year
___ was a problem in 1966 spring term but is no longer
___ was a problem in 1966 spring term but is less so this year
___ was a problem in 1966 spring term and is even greater this year

Comment: ____

____

b) Need for special training in teaching reading

___ was not a problem in 1966 spring term
___ was not a problem in 1966 spring term but is this year
___ was a problem in 1966 spring term but is no longer
___ was a problem in 1966 spring term but is less so this year
___ was a problem in 1966 spring term and is even greater this year

Comment: ____

____

c) Need for material better suited to the program, especially books for older students which are not "baby books."

___ was not a problem in 1966 spring term
___ was not a problem in 1966 spring term but is this year
___ was a problem in 1966 spring term but is no longer
___ was a problem in 1966 spring term but is less so this year
___ was a problem in 1966 spring term and is even greater this year

Comment: ____

____

d) Need for more flexibility in the program, especially for variations such as teaching English as a second language.

___ was not a problem in 1966 spring term
___ was not a problem in 1966 spring term but is this year
___ was a problem in 1966 spring term but is no longer
___ was a problem in 1966 spring term but is less so this year
___ was a problem in 1966 spring term and is even greater this year

Comment: ______________________________

____

e) Friction between the classroom and compensatory teacher particularly due to classroom disruption caused by students going and coming to compensatory classes and a lack of understanding of compensatory class goals.

___ was not a problem in 1966 spring term
___ was not a problem in 1966 spring term but is this year
___ was a problem in 1966 spring term but is no longer
___ was a problem in 1966 spring term but is less so this year
___ was a problem in 1966 spring term and is even greater this year

Comment: ______________________________

____

f) Difficulties in acquiring supplies.

___ was not a problem in 1966 spring term
___ was not a problem in 1966 spring term but is this year
___ was a problem in 1966 spring term but is no longer
___ was a problem in 1966 spring term but is less so this year
___ was a problem in 1966 spring term and is even greater this year

Comment: ______________________________

____

12. If you were a compensatory teacher during the current year only, please indicate the extent to which you have found the following areas to be problems.

a) Need for more homogeneous grouping by reading ability rather than age.

___ did not find this a problem
___ found this to be a major problem
___ found this to be some problem

Comment: ______________________________

____

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
OFFICE OF COMPENSATORY EDUCATION
ROOM 213-A, 135 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102

May 24, 1967

To: ESEA - SCHOOL LIBRARIANS

From: Miss Tennessee Kent, Assistant Superintendent, Elementary Division
Miss Geraldine Ferring, Supervisor of Libraries and Textbooks
Mr. Victor Rossi, Supervisor, Compensatory Education

Attached to this letter is a questionnaire on the services you provided in ESEA target area schools during the 1966-67 school year. It would be greatly appreciated if you would fill out the questionnaire and return it in the attached envelope, to Mrs. Marjorie Pulsifer, Room 213-A, at the above address. You are not required to identify yourself on the questionnaire but you may do so if you wish.

This information will be used in preparing required reports for the State of California on the use and effectiveness of ESEA funds in the District schools. It will also be used within the District to improve our program next year.

If after you have filled out the questionnaire you feel that there are some questions that should have been asked that weren't, please state and answer them. Such additional information can and will be used. Your help will be very much appreciated.

COMPENSATORY EDUCATION PROGRAM
LIBRARIAN ACTIVITIES SUMMARY
School Year 1966-67

Name of librarian: ______________________________
Last First Initial

1. Please describe briefly the activities and functions that make up a "typical" week for you: ______________________________

____

____

____

2. For each of the schools for which you have responsibility, please describe the objectives you have sought to achieve and the program you have carried out in pursuit of these objectives:

____

Name of School "A": ______________________________

Principal Objectives	Activities Directed Toward Objectives
1. ____________	1. ____________
____________	____________
2. ____________	2. ____________
____________	____________
3. ____________	3. ____________
____________	____________
4. ____________	4. ____________
____________	____________
5. ____________	5. ____________
____________	____________

Name of School "B": ______________________________

Principal Objectives	Activities Directed Toward Objectives
1. ______________________________	1. ______________________________
______________________________	______________________________
2. ______________________________	2. ______________________________
______________________________	______________________________
3. ______________________________	3. ______________________________
______________________________	______________________________
4. ______________________________	4. ______________________________
______________________________	______________________________
5. ______________________________	5. ______________________________
______________________________	______________________________

3. For each school for which you have responsibility, please estimate about how many hours each week you spend in various activities:

Activities	Estimated Hours at School "A"	Estimated Hours at School "B"
a. working directly with children	___	___
b. working directly with teachers	___	___
c. working with other school personnel . .	___	___
d. working with library materials	___	___
e. other activities (please describe):		
______________________________	___	___
______________________________	___	___
______________________________	___	___
ESTIMATED TOTAL HOURS	___	___

4. About how many different children do you come in contact with each week?	School "A"	School "B"
a. number who come to the library area	____	____
b. number to whom the librarian goes directly . .	____	____

5. What instructional aids and devices do you use in your programs in both schools? (For each instructional aid listed, please check the appropriate space on the "frequency of use" scale for both School "A" and School "B")

Instructional Aid or Device	School	Use about every day ... Practically never use
a. tape recorder	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
b. listening center . .	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
c. filmstrip machine . .	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
d. movie projector . . .	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
e. overhead projector .	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
Other devices (list)		
____________________	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
____________________	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:
____________________	"A"	:___:___:___:___:___:___:
	"B"	:___:___:___:___:___:___:

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
OFFICE OF COMPENSATORY EDUCATION
ROOM 213-A, 135 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102

June 1, 1967

To: Social Workers
Operating in ESEA Target Schools

From: Miss Tennessee Kent, Assistant Superintendent, Elementary Division
Mrs. Alice Henry, Supervisor, Child Guidance Services
Mr. Victor Rossi, Supervisor, Compensatory Education

Attached to this letter is a questionnaire on the services you provided in ESEA target area schools during the 1966-67 school year. It would be greatly appreciated if you would fill out the questionnaire and return it in the attached envelope, to Mrs. Marjorie Pulsifer, Room 213-A, at the above address.

This information will be used in preparing required reports for the State of California on the use and effectiveness of ESEA funds in the District schools. It will also be used within the District to improve our program next year.

If after you have filled out the questionnaire you feel that there are some questions that should have been asked that weren't, please state and answer them. Such additional information can and will be used. Your help will be very much appreciated.

SRI/SFUSD
6336 (6-67)
SW

SOCIAL WORKER WORKLOAD SUMMARY

School Year 1966-67

Name of social worker: ______________________________
Last First Initial

1. Please describe briefly the activities and functions that make up a "typical" week for you: ______________________________

____

____

2. About what percent of your total time do you spend in various contacts and activities?

a.	contacts with individual students	______%
b.	contacts with parents	______%
c.	contacts with teachers, administrators and other school staff	______%
d.	contacts with other agencies (Juvenile Court, Health Department, private agencies, etc.)	______%
e.	maintaining records and preparing reports	______%
f.	Other activities (please describe):	
	______________________________	______%
	______________________________	______%
	______________________________	______%
g.	TOTAL TIME	100 %

3. What is the single most satisfying feature of your assignment? ______________________________

____

____

4. What is the single least satisfying feature of your assignment? ______________________________

____

____

5. What suggestions can you offer for making the role of the social worker in the Compensatory Education Program more effective in 1967-68? (Please use reverse side if necessary):

____

____

____

6336 (6-67)
SW

SOCIAL WORKER WORKLOAD

Name of Social Worker ______________________________
Last First Initial

School ______________________________

	No. of Contacts for School Yr. 1966-67		
Name of child in target area school	Child	Parent	Other (Including school personnel and agencies)

Estimate number of children you serve in each non-target school:

Name of School	Number of Children

STANFORD RESEARCH INSTITUTE
MENLO PARK, CALIFORNIA 94025

June 7, 1967

To: Teachers in Charge of Study Centers - San Francisco Unified School District

From: Thomas C. Thomas, Stanford Research Institute

The first full year of the District's Compensatory Education Program supported by ESEA Title I funds is rapidly drawing to a close. The purpose of this note is to solicit your personal appraisal of operation of the study centers during the 1966-67 school year and to invite your ideas about ways in which this area might be strengthened during the coming year.

As you know, Stanford Research Institute has been retained to help the District evaluate the effects of the ESEA Compensatory Program. To this end, lists have already been collected of the names and attendance records of study center participants. Changes in their academic behavior will be analyzed. However, each individual study center faced different local conditions and was set up and operated somewhat differently. We need your help to ascertain these differences.

In a separate letter, will you please provide us with your frank comments regarding the program as you view it and as you have experienced it thus far. Please organize your remarks around the topics suggested below. You may enclose your comments in the attached envelope and return to Mrs. Marjorie Pulsifer through the school pick-up. We hope you will identify yourself by signing your letter. Whether or not you choose to sign it, you may be assured that your comments will be treated as confidential. No individual will be identified by name or title in summaries of comments that may be prepared. The purpose of this request is to get your ideas about how to improve the program, including how best to evaluate it; please be as candid and as constructively critical as possible.

Suggested Points to Cover in Your Comments

1. The primary objectives of the study center program during the 1966-67 school year. Do you feel any change in these objectives is desirable?

2. How was the study center set up? Include the relationship to the regular school program and the way in which participation was described to teachers, students, and parents. Should any change be made in setting up the center next year?

To: Teachers in Charge of Study Centers June 7, 1967
From: Thomas C. Thomas

3. What resources were available to you in the operations of the study center; for example, paid or volunteer aides, special books or supplies, audio-visual material, and so forth? How did you use them in the operation of the center? What additional resources do you feel would be particularly valuable?

4. What do you judge the effect of the study center was in the most affected student; on the average student? What (if any) comments did you receive from teachers, students, or their parents on the effect of the study center on the participants?

5. What do you consider to be the main strengths and weaknesses of the study center program (if not already covered)?

In addition, information on attendance for the Spring Semester, 1967 is needed. Please list the name, grade level, birthdate, home school, and approximate number of days attendance of participating students.

One list from each school is sufficient. If more than one teacher is servicing the study center, this attendance data may be prepared jointly.

Attachment

STANFORD RESEARCH INSTITUTE

MENLO PARK, CALIFORNIA 94025

May 6, 1967

To: ESEA - Central Office Staff

From: Thomas C. Thomas

This coming week marks the end of the second year of the District's Compensatory Education Program supported by ESEA Title I funds. We wish to again solicit your personal appraisal of the extent to which your part of the Program is moving toward the goals you hold for it and to invite your ideas about ways in which your participation in the program might be strengthened during the coming school year.

In a separate letter, will you please provide us with your frank comments organized around the topics suggested below. You may enclose your comments in the attached envelope and give it to Marjorie Pulsifer, who will see that we receive it. We hope you will identify yourself but whether or not you choose to do so, you may be assured that your comments will be treated as confidential. Please be as candid and as constructively critical as possible.

Desired Information

1. A formal job description--specify the responsibilities and objectives of the position and the reporting and working relationship with members of the administration and professional staff.

2. Normal operating methods - describe your work plan during an average week. Which are the aspects of your work that occur on a repetitive basis and which are the aspects that are in response to specific needs as they arise?

3. What have been the most successful aspects of your job during the current school year?

4. What have been the least successful aspects of your job during the current school year?

5. As the ESEA Compensatory program has developed, have the requirements of your job changed? How were the needs faced in the Spring of 1966 different from the needs this Spring - do you expect further changes by the Spring of 1968?

6. What changes (if any) do you feel should be made in your job description and/or your relationship to school administrators and professional staff to increase the effectiveness of your services in the compensatory program? Do you see any needs in the compensatory program which are unfilled and limit the effect of your efforts?

Attachment

SAN FRANCISCO UNIFIED SCHOOL DISTRICT
OFFICE OF COMPENSATORY EDUCATION
ROOM 213-A, 135 VAN NESS AVENUE
SAN FRANCISCO, CALIFORNIA 94102

May 24, 1967

To: ESEA - COMMUNITY TEACHERS

From: Miss Tennessee Kent, Assistant Superintendent, Elementary Division
Mr. Martin J. Dean, Coordinator, Child Welfare
Mr. Victor Rossi, Supervisor, Compensatory Education

Attached to this letter is a questionnaire on the services you provided in ESEA target area schools during the 1966-67 school year. It would be greatly appreciated if you would fill out the questionnaire and return it in the attached envelope, to Mrs. Marjorie Pulsifer, Room 213-A, at the above address. You are not required to identify yourself on the questionnaire but you may do so if you wish.

This information will be used in preparing required reports for the State of California on the use and effectiveness of ESEA funds in the District schools. It will also be used within the District to improve our program next year.

If after you have filled out the questionnaire you feel that there are some questions that should have been asked that weren't, please state and answer them. Such additional information can and will be used. Your help will be very much appreciated.

SRI/SFUSD
6336 (5-67)
"Com"

COMMUNITY TEACHER WORKLOAD SUMMARY

School Year 1966-67

Name of community teacher: ____
Last First Initial

1. Please describe briefly the activities and functions that make up a "typical" week for you: ____

____

____

2. About what percent of your total time do you spend in various contacts and activities?

a. contacts with individual students . . . . ______ %
b. contacts with parents . . . . ______ %
c. contacts with community organizations (EOC, parents' organizations, P-TAs, etc.) . . . . ______ %
d. contacts with teachers . . . . ______ %
e. contacts with administrators . . . . ______ %
f. contacts with other school staff . . . . ______ %
g. contacts with agencies such as Juvenile Court, Health Department, etc. . . . . ______ %
h. maintaining records . . . . ______ %
i. preparing reports . . . . ______ %
j. other activities (please describe): . . . . ______ %

____ ______ %

____ ______ %

____ ______ %

k. TOTAL TIME . . . . 100 %

3. What portion of your contacts with individual students is tutorial rather than counseling oriented? ____

____

4. What is the single most satisfying feature of your assignment? ______________

____

____

5. What is the single least satisfying feature of your assignment?______________

____

____

6. Describe briefly what you consider to be the most important objectives of the Community Teacher as part of the Compensatory Education Program. (If there are objectives that you consider important, but to which you have not been able to direct sufficient attention this year, please emphasize these in particular.) USE REVERSE SIDE IF NECESSARY

____

____

____

____

____

____

____

____

7. What suggestions can you offer for making the role of the Community Teacher in the Compensatory Education Program more effective in 1967-68? USE REVERSE SIDE IF NECESSARY

____

____

____

____

____

____

____

____